## RESEARCH EXPENDITURES September 1, 2005 – August 31

September 1, 2005 – August 31, 2006

Texas Universities and Health-Related Institutions

Texas Higher Education Coordinating Board Division of Finance, Campus Planning, and Research P.O. Box 12788 Austin, TX 78711-2788

June 2007

### **Texas Higher Education Coordinating Board**

Robert W. Shepard (Chairman) Neal W. Adams (Vice Chairman) Lorraine Perryman (Secretary of the Board) Laurie Bricker Paul Foster Fred W. Heldenfels IV Joe B. Hinton George Louis McWilliams Elaine Mendoza Nancy R. Neal Lyn Bracewell Phillips Curtis E. Ransom A. W. "Whit" Riter, III Harlingen Bedford Odessa Houston El Paso San Marcos Crawford Texarkana San Antonio Lubbock Bastrop Dallas Tyler

### **Commissioner of Higher Education**

Raymund A. Paredes

### **Mission of the Coordinating Board**

The Texas Higher Education Coordinating Board's mission is to work with the Legislature, Governor, governing boards, higher education institutions and other entities to help Texas meet the goals of the state's higher education plan, *Closing the Gaps by 2015*, and thereby provide the people of Texas the widest access to higher education of the highest quality in the most efficient manner.

### Philosophy of the Coordinating Board

The Texas Higher Education Coordinating Board will promote access to quality higher education across the state with the conviction that access without quality is mediocrity and that quality without access is unacceptable. The Board will be open, ethical, responsive, and committed to public service. The Board will approach its work with a sense of purpose and responsibility to the people of Texas and is committed to the best use of public monies. The Coordinating Board will engage in actions that add value to Texas and to higher education. The agency will avoid efforts that do not add value or that are duplicated by other entities.

The Texas Higher Education Coordinating Board does not discriminate on the basis of race, color, national origin, gender, religion, age or disability in employment or the provision of services.

## **EXECUTIVE SUMMARY**

The first six sections of this report are based on data provided by universities and healthrelated institutions for Fiscal Year 2006 – September 1, 2005 through August 31, 2006. Highlights include:

- Total reported research expenditures were \$3,182,963,943 in Fiscal Year 2006. Expenditures at public institutions increased 7.0 percent over Fiscal Year 2005 (from \$2,468,646,913 in FY 2005 to \$2,642,115,637 in FY 2006.)
- Research expenditures at public universities and health-related institutions grew \$56,062,441 (4.5 percent) and \$117,406,283 (9.6 percent), respectively, compared to Fiscal Year 2005.
- Research expenditures at public institutions increased by 108.7 percent since Fiscal Year 1996.
- Scientific discipline categories benefitting from the largest research expenditures include medical sciences – \$1,162,189,550; biological and other life sciences – \$820,380,576; engineering – \$410,415,831; and physical sciences – \$173,380,164.
- The federal government provided \$1,867,866,076 (58.7 percent) of the research funds expended.

The seventh section of this report is based on data provided by the National Science Foundation for Fiscal Year 2004, the most recent year for which data are available. Highlights include:

- Texas ranked third among the states in total research expenditures for Fiscal Year 2004. Life sciences accounted for 68 percent of the research expenditures, followed by engineering (13 percent) and physical sciences (6 percent), at Texas institutions.
- Texas institutions of higher education ranked fifth in federal obligations for *research and development* in science and engineering, after California, New York, Pennsylvania, and Maryland.
- The National Institutes of Health provide 65 percent of the federal research support for science and engineering to Texas higher education institutions.
- Eight institutions Baylor College of Medicine, The University of Texas at Austin, The University of Texas Southwestern Medical Center at Dallas, Texas A&M University (including Texas A&M Service agencies), The University of Texas M.D. Anderson Cancer Center, The University of Texas Health Science Center at Houston, The University of Texas Health Science Center at San Antonio, and The University of Texas Medical Branch at Galveston – accounted for 83 percent of the federal obligations for research and development in science and engineering to Texas higher education institutions in Fiscal Year 2004.

ii

# TABLE OF CONTENTS

Executive Summary	i
Overview	1
Major Findings	3
Statewide Summary Data	5
Institutional Data – Universities	13
Institutional Data – Health-Related Institutions	23
Historical Data for Public Institutions	27
National Comparisons	32

Appendix A:	Research Expenditures Surveys	A-1
Appendix B:	Differences in THECB and NSF Survey	B-1
Appendix C:	Institutional Contacts	C-1

## LIST OF TABLES AND FIGURES

### Tables:

1 –	Research and Development Expenditures Rankings, FY 2006
2 –	Federal/State Research and Development Expenditures Ratio Rankings, FY 20064
3 –	Sources of Funds for Research and Development, FY 20065
4 –	Expenditures for Conduct of R&D by Field and Source of Funding, FY 2006, Texas Institutions of Higher Education9
5 –	Expenditures for Conduct of R&D in Areas of Special Interest, FY 2006, Texas Universities
6 –	Expenditures for Conduct of R&D in Areas of Special Interest, FY 2006, Texas Health-Related Institutions
7 –	Total Expenditures for Research and Other Research-Related Sponsored Programs by Source of Funds, Texas Universities, FY 2006
8 –	Federal R&D Expenditures/FTE Faculty Ratio, FY 2006, Texas Public Universities17
9 –	Expenditures for Conduct of R&D by Field, FY 2006, Texas Universities
10 –	Expenditures for Conduct of R&D by Area of Special Interest, FY 2006 Texas Universities
11 –	Total Expenditures for Research and Other Research-Related Sponsored Programs by Source of Funds, Texas Health Related Institutions, FY 2006
12 –	Expenditures for Conduct of R&D by Field, FY 2006, Texas Health-Related Institutions25
13 –	Expenditures for Research and Development by Area of Special Interest, FY 2006 Texas Public Health-Related Institutions
14 –	Expenditures for Research and Development, Texas Public Universities
15 –	Federal Expenditures for Research and Development, Texas Public Universities
16 –	Expenditures for Research and Development, Texas Public Health-Related Institutions
17 –	Federal Expenditures for Research and Development, Texas Public Health-Related Institutions
18 –	Federal Expenditures for Research and Development by Field, Texas Public Universities and Health-Related Institutions

19 –	Top Five States in Federal R&D Expenditures, Selected Science and Engineering Fields, FY 2004
20 –	State Rank in Federal Obligations and Federally Financed R&D, FY 2004
21 –	Federal Obligations and Federally Financed R&D by Texas Institutions, FY 2004
22 –	Texas Universities and Colleges with Federal Science and Engineering R&D Obligations of More Than \$10 Million by Support Agency, FY 2004
Figu	ires:
1 –	Sources of Expenditures for Research and Development at Texas Institutions of Higher Education, FY 20066
2 –	Sources of Expenditures for Research and Development at Texas Universities, FY 2006
3 –	Sources of Expenditures for Research and Development at Texas Health-Related Institutions, FY 20067
4 –	Growth Rates in Research and Development Expenditures at Texas Public Institutions of Higher Education, FY 2001 - FY 2006
5 –	Expenditures for Conduct of R&D by Discipline10
6 –	Expenditures for Research and Development at Texas Universities, FY 200613
7 –	Expenditures for Research and Development at Texas Health-Related Institutions, FY 2006
8 –	Expenditures for Research and Development at Texas Public Institutions of Higher Education, FY 1986 – FY 2006
9 –	Federal Obligations for R&D in Science and Engineering, Universities and Colleges – Selected States, 1995-2004
10 –	Federally Financed R&D Expenditures, Universities and Colleges – Selected States, 1995-2004
11 –	Federal Obligations for R&D in Science and Engineering, Texas Universities and Colleges, 1995-2004 – Top Five Support Agencies
12 –	Federally Financed Research Expenditures by Discipline, Texas Public and Private Institutions, FY 2004

## **OVERVIEW**

The Texas Higher Education Coordinating Board's annual research expenditures report summarizes data submitted to the Board as required by Section 61.051(h) of the Texas Education Code, which states:

"Once a year, on dates prescribed by the board, each institution of higher education shall report to the board all research conducted at that institution during the last preceding year."

The Coordinating Board's summary report is based on expenditures rather than awards because expenditures more accurately reflect the level of current research activity. Awards tend to fluctuate from year to year, making them a much less stable indicator for year-to-year comparisons. The Coordinating Board is only able to verify the accuracy of the research expenditures data by asking institutions to ensure that the data reported are consistent with data in their Annual Financial Reports.

Expenditures related to research are divided into two categories: expenditures for the conduct of (1) research and development and (2) other research-related sponsored activities. "Other research-related sponsored activities" refers to support received from external sources to fund activities that cannot be considered strictly research. Examples include grants for equipment or facilities, contracts to perform studies, and training. Definitions for both categories are included in the survey form that is Appendix A. Some institutions do not report funds used for other sponsored activities related to research. Expenditures for research and development account for 98.7 percent of all reported expenditures.

A set of definitions is provided in the research expenditures survey to help ensure consistency from institution to institution. Even with these safeguards, institutions have some latitude in determining how they report data.

Data elements and definitions used in this year's report are comparable to similar research expenditure data elements used by the National Science Foundation (NSF). The two sets of elements differ to some degree because the NSF focuses on science and technology alone, while the Coordinating Board's report includes research in all disciplines.

Collection of research expenditure data is a challenging task for institutions. Administrators face many difficulties as they sort out research expenditures at their institutions. For that reason, information they have submitted and the Coordinating Board's research expenditures report should be considered indicative rather than definitive.

Appendix A includes a copy of the survey form completed by each institution. Appendix B is a list of differences in THECB and NSF Survey. Appendix C includes a list of the institutional contacts who collected the data on their campuses.

This report also contains a section, beginning on page 32, that compares research funding in Texas with that of other states. These data are drawn from three National Science Foundation reports on research obligations and research expenditures.

Total research expenditures at Texas public institutions of higher education increased by 7.0 percent during Fiscal Year 2006, continuing a long-term growth trend. Expenditures at public universities and health-related institutions grew \$56,062,441 (4.5 percent) and \$117,406,283 (9.6 percent), respectively, compared to Fiscal Year 2005.

As in most states, Texas' higher education research expenditures were concentrated in a relatively small number of institutions. Collectively, the top five institutions in research spending accounted for 65 percent of total research expenditures. The top 10 institutions accounted for 85 percent of the total. Seven of the state's health-related institutions ranked among the top 10 Texas public institutions in research expenditures.

In addition, the top eight institutions in Table 1 also appear in the National Science Foundation's list of top 100 institutions in federal research and development expenditures for Fiscal Year 2004.

Research and Development Expenditures Rankings, FY 2006						
Institution	2002	2003	2004	2005	2006	
The University of Texas at Austin	2	2	2	3	1	
Texas A&M University (including Texas A&M Services)	1	1	1	2	2	
Baylor College of Medicine*	-	-	-	1	3	
The University of Texas M.D. Anderson Cancer Center	4	3	4	4	4	
The University of Texas Southwestern Medical Center at Dallas	3	4	3	5	5	
The University of Texas Health Science Center at Houston	5	5	5	6	6	
The University of Texas Medical Branch at Galveston	7	6	6	7	7	
The University of Texas Health Science Center at San Antonio	6	7	7	8	8	
University of Houston	8	8	8	9	9	
Texas A&M University System Health Science Center	10	10	9	10	10	

Table 1

\*FY2005 was the first year Baylor College of Medicine was included in this report.

At academic institutions<sup>1</sup> nationwide, the National Science Foundation/SRS, *Academic Research and Development Expenditures: Fiscal Year 2004, Table B-30* shows that 63.8 percent of the academic research was funded by the federal government. The federal

<sup>&</sup>lt;sup>1</sup>For this purpose, academic institutions are generally defined as institutions of higher education that grant bachelor's and higher degrees that reported at least \$150,000 in separately budgeted R&D expenditures in science and engineering in the previous fiscal year.

government funded 58.7 percent of all research expenditures by Texas institutions of higher education, making it the source of most research funds – as it is in other states. State government in Texas provided 16.3 percent of the funds for all research expenditures in the state's higher education institutions (Figure 1). Institutional and private funding accounted for the remaining 25.0 percent.

The ratio of federal funds to state-appropriated funds for each of the 10 Texas institutions reporting the greatest research expenditures is provided in Table 2.

Federal/State Research and Development Expenditures Ratio Rankings, FY 2006						
Institution	R&D	Fed/State	Ratio			
	Rank	Ratio	Rank			
Baylor College of Medicine*	3	43.61	1			
The University of Texas Health Science Center at San Antonio	8	12.36	2			
The University of Texas Medical Branch at Galveston	7	10.55	3			
The University of Texas Southwestern Medical Center at Dallas		5.79	4			
The University of Texas at Austin	1	5.71	5			
The University of Texas Health Science Center at Houston	6	4.74	6			
Texas A&M University System Health Science Center		2.47	7			
University of Houston	9	2.12	8			
Texas A&M University (including Texas A&M Services)	2	1.56	9			
The University of Texas M.D. Anderson Cancer Center	4	1.50	10			

Т	а	b	le	2
	_	_	-	

\*FY2005 was the first year Baylor College of Medicine was included in this report.

Although not ranked, the Univ North Texas HSC had the highest Fed/State ratio, 194.75.

Medical sciences, accounting for 37 percent of the total, led all other disciplines in expenditures. The top five disciplines – medical sciences, biological and other life sciences, engineering, physical sciences, and environmental sciences – collectively accounted for 84.7 percent of all reported research expenditures.

Texas ranked third among the states in total research expenditures for Fiscal Year 2004 (behind California and New York).

California (\$3.46 billion), New York (\$1.94 billion), Pennsylvania (\$1.49 billion), Maryland (\$1.38 billion), Texas (\$1.34 billion), and Massachusetts (\$1.34 billion) were the top six states in federal obligations for *research and development* in science and engineering for Fiscal Year 2004.

The National Institutes of Health, the Department of Defense, and the National Science Foundation provided 72.0 percent, 11.4 percent, and 7.4 percent, respectively, of the Fiscal Year 2004 federal obligations for *research and development* in science and engineering to Texas higher education institutions.

## STATEWIDE SUMMARY DATA

Table 3 and Figures 1–3 provide information on expenses and sources of funds for research and development at universities and health-related institutions.

Figure 4 shows growth rates in research and development expenditures for public universities and health-related institutions. Expenditures were \$173 million higher in Fiscal Year 2006 than in Fiscal Year 2005, with increases of \$56 million at public universities and \$117 million at public health-related institutions. Thirty-six percent of the increase is from federal sources.

Sources of Funds for Research and Development, FY 2006					
	State		ate		
	Federal Appropriated		Contracts	Institution	
		Appropriated	and Grants		
Public					
Universities	\$715,511,880	\$188,607,425	\$98,128,695	\$139,172,540	
Health-Related Institutions	\$787,660,775	\$205,870,794	\$18,809,931	\$70,290,520	
All Public Institutions	\$1,503,172,655	\$394,478,219	\$116,938,626	\$209,463,060	
Independent					
Universities	\$77,014,530	\$0	\$2,196,194	\$7,062,007	
Health-Related Institutions	\$287,678,891	\$3,219,928	\$3,376,574	\$109,300,909	
All Independent Institutions	\$364,693,421	\$3,219,928	\$5,572,768	\$116,362,916	
Universities	\$792,526,410	\$188,607,425	\$100,324,889	\$146,234,547	
Health-Related Institutions	\$1,075,339,666	\$209,090,722	\$22,186,505	\$179,591,429	
Totals	\$1,867,866,076	\$397,698,147	\$122,511,394	\$325,825,976	

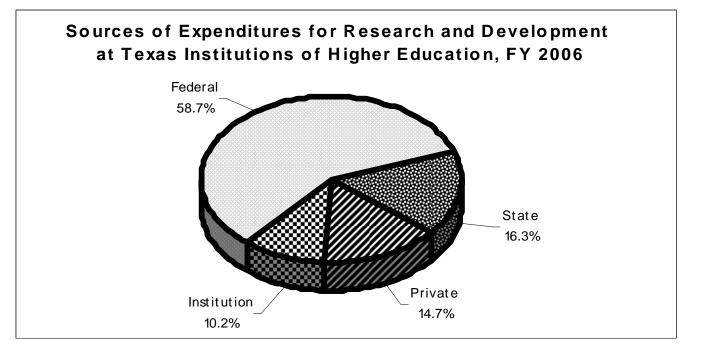
Table 3

(table continued on next page)

Sources of Funds for Research and Development, FY 2006					
	Priv	rate	Total		
	Profit	Non-Profit	TOtal		
Public					
Universities	\$79,412,711	\$77,919,691	\$1,298,752,942		
Health-Related Institutions	\$82,280,891	\$178,449,784	\$1,343,362,695		
All Public Institutions	\$161,693,602	\$256,369,475	\$2,642,115,637		
Independent					
Universities	\$4,131,551	\$7,078,368	\$97,482,650		
Health-Related Institutions	\$16,465,458	\$23,323,896	\$443,365,656		
All Independent Institutions	\$20,597,009	\$30,402,264	\$540,848,306		
Universities	\$83,544,262	\$84,998,059	\$1,396,235,592		
Health-Related Institutions	\$98,746,349	\$201,773,680	\$1,786,728,351		
Totals	\$182,290,611	\$286,771,739	\$3,182,963,943		

### Table 3 - continued

Figure 1





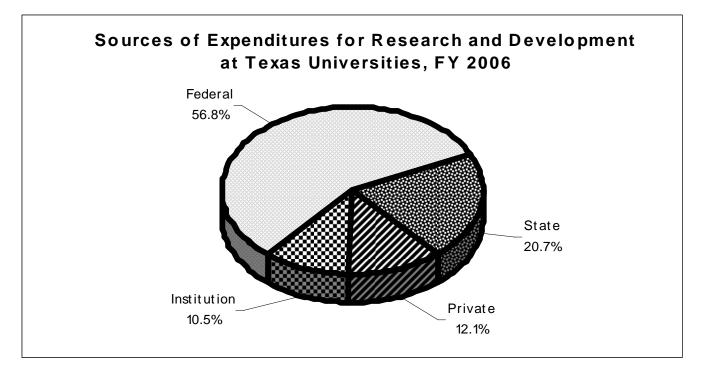
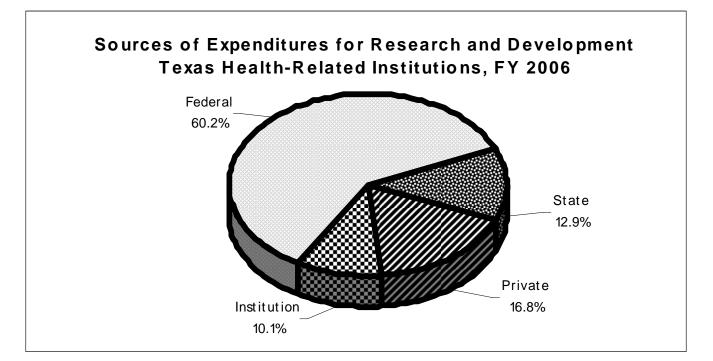
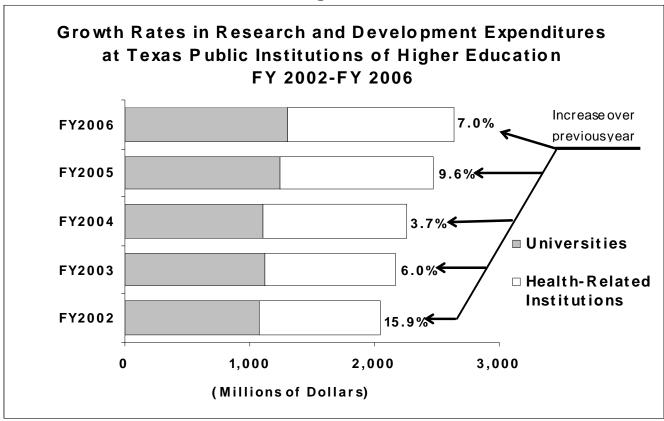


Figure 3







The accelerated growth in research expenditures peaked in 2002, dropping precipitously in two of the following years to overall growth rates comparable to those of the mid-1990s, and well below those characteristic of the 1980s. The sudden decline in the growth rate of research expenditures at public universities in Fiscal Years 2003 and 2004 is a unique feature in the history of research expenditures at Texas public higher education institutions, and resulted from slow growth in federal support and reduction in state support during those years.

Table 4 indicates expenditures in the 16 different fields defined in Appendix A. The Coordinating Board's instructions directed institutions to assign project expenditures to only one field to avoid duplication.

For the most part, this table reflects expenditures in particular academic disciplines. Some inconsistency may result, however, as institutions strive to categorize a particular research project into only one field. For example, a college of agriculture could perform basic research in biological sciences and report expenses in that field rather than in agricultural sciences.

Proportions of expenses by discipline are shown in Figure 5. Medical and biological sciences account for slightly more than 62 percent of all research expenditures.

Expenditures for Conduct of R&D by Field and Source of Funding, FY 2006						
Texas Institutions of Higher Education						
		State				
	Federal	Appropriated	Contracts	Institution		
		Appropriated	and Grants			
Agricultural Sciences	\$38,748,973	\$27,905,353	\$3,895,476	\$12,015,774		
Biological and Other Life Sciences	\$516,256,755	\$111,957,309	\$5,610,617	\$81,417,841		
Computer Science	\$48,781,635	\$6,184,533	\$4,265,626	\$3,289,615		
Engineering	\$217,786,514	\$39,759,030	\$55,795,901	\$40,247,544		
Environmental Sciences	\$83,431,363	\$14,811,422	\$8,294,165	\$7,183,952		
Mathematical Sciences	\$35,739,777	\$13,557,705	\$611,947	\$2,992,764		
Medical Sciences	\$677,208,333	\$123,175,206	\$21,610,929	\$127,732,279		
Physical Sciences	\$116,521,706	\$15,620,157	\$811,917	\$14,469,114		
Psychology	\$33,416,743	\$3,685,947	\$4,391,264	\$3,621,646		
Social Sciences	\$23,337,622	\$11,233,476	\$9,233,691	\$4,855,317		
Other Sciences	\$10,741,742	\$6,131,095	\$593,167	\$2,739,339		
Arts and Humanities	\$1,245,091	\$1,153,425	\$739,351	\$4,368,598		
Business Administration	\$1,910,319	\$3,079,405	\$613,080	\$2,171,027		
Education	\$46,631,357	\$1,616,689	\$3,971,735	\$4,818,031		
Law and Public Administration	\$3,360,329	\$1,695,065	\$975,787	\$150,411		
Other Non-Science Activities	\$12,747,817	\$16,132,330	\$1,096,741	\$13,752,724		
Totals	\$1,867,866,076	\$397,698,147	\$122,511,394	\$325,825,976		

### Table 4

Г

(table continued on next page)

٦

Expenditures for Conduct of R&D by Field and Source of Funding, FY 2006 Texas Institutions of Higher Education						
	Pri	vate	Total			
	Profit	Non-Profit	iolai			
Agricultural Sciences	\$4,108,557	\$7,583,604	\$94,257,737			
Biological and Other Life Sciences	\$16,803,753	\$88,334,301	\$820,380,576			
Computer Science	\$2,481,888	\$1,198,206	\$66,201,503			
Engineering	\$40,144,915	\$16,681,927	\$410,415,831			
Environmental Sciences	\$10,731,243	\$6,438,052	\$130,890,197			
Mathematical Sciences	\$3,546,442	\$1,843,719	\$58,292,354			
Medical Sciences	\$88,012,346	\$124,450,457	\$1,162,189,550			
Physical Sciences	\$8,246,285	\$17,710,985	\$173,380,164			
Psychology	\$386,910	\$1,376,887	\$46,879,397			
Social Sciences	\$2,532,151	\$6,606,828	\$57,799,085			
Other Sciences	\$844,652	\$1,893,496	\$22,943,491			
Arts and Humanities	\$669,710	\$1,452,400	\$9,628,575			
Business Administration	\$1,933,102	\$3,424,111	\$13,131,044			
Education	\$459,845	\$5,315,975	\$62,813,632			
Law and Public Administration	\$162,006	\$431,567	\$6,775,165			
Other Non-Science Activities	\$1,226,806	\$2,029,224	\$46,985,642			
Totals	\$182,290,611	\$286,771,739	\$3,182,963,943			

Table 4 - continued

# Figure 5

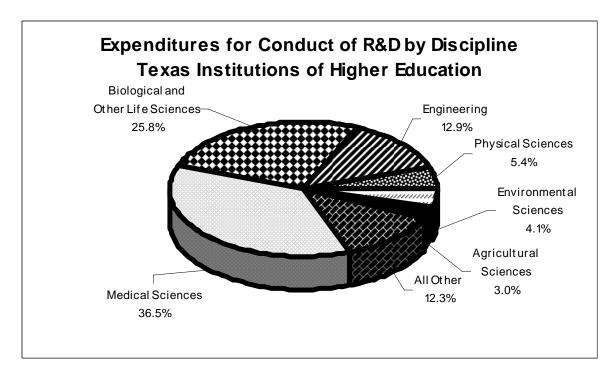


Table 5 shows research in nine different areas of special interest at universities, and Table 6 shows research in six different areas of special interest at health-related institutions. Double counting was allowed because many projects are relevant to two or more areas of research.

Expenditures for Conduct of R&D in Areas of Special Interest, FY 2006 **Texas Universities** State Federal Institution Contracts Appropriated and Grants \$14,450,401 \$1,110,811 \$672,748 Aerospace Technology \$1,198,318 Biotechnology \$26,152,976 \$2,298,989 \$58,419,974 \$5,227,142 Energy \$32,236,570 \$5,544,791 \$1,050,351 \$1,285,943 Environmental Science & Engineering \$47,210,052 \$13,476,053 \$4,091,638 \$4,697,730 Food, Fiber, Agricultural Products \$25,922,640 \$31,075,990 \$2,272,387 \$16,265,805 Manufacturing Technology \$8,628,694 \$1,421,638 \$571,457 \$609,399 Materials Science \$29,031,681 \$1,208,283 \$4,832,940 \$1,788,526 Microelectronics & Computer Technology \$54,536,121 \$5,569,842 \$1,711,604 \$3,340,330 Water Resources \$10,465,584 \$4,345,427 \$2,034,467 \$2,128,634 Totals \$280,901,717 \$89,993,318 \$19,974,644 \$36,016,257

### Table 5

### Table 5 - continued

Expenditures for Conduct of R&D in Areas of Special Interest, FY 2006 Texas Universities					
	Private		Total		
	Profit	Non-Profit	TOLAI		
Aerospace Technology	\$786,837	\$469,692	\$18,688,807		
Biotechnology	\$4,609,877	\$7,366,045	\$104,075,003		
Energy	\$2,653,595	\$7,930,932	\$50,702,182		
Environmental Science & Engineering	\$1,784,554	\$8,718,126	\$79,978,153		
Food, Fiber, Agricultural Products	\$3,856,782	\$8,002,385	\$87,395,989		
Manufacturing Technology	\$749,142	\$555,150	\$12,535,480		
Materials Science	\$3,541,806	\$3,839,456	\$44,242,692		
Microelectronics & Computer Technology	\$2,735,701	\$6,192,614	\$74,086,212		
Water Resources	\$1,177,042	\$1,066,555	\$21,217,709		
Totals	\$21,895,336	\$44,140,955	\$492,922,227		

Table 6

Expenditures for Conduct of R&D in Areas of Special Interest, FY 2006 Texas Health-Related Institutions						
		Sta	ite			
	Federal Appropriated		Contracts	Institution		
		Appropriated	and Grants			
Aging	\$46,658,628	\$1,365,643	\$214,228	\$2,594,511		
Cancer Research	\$276,052,636	\$127,330,655	\$516,522	\$49,224,268		
Cardiovascular Research	\$83,354,378	\$2,555,507	\$90,499	\$11,842,676		
Child Health and Human Development	\$86,489,079	\$490,900	\$7,723,261	\$11,409,888		
Mental Health	\$46,027,921	\$632,004	\$238,851	\$7,297,378		
Substance Abuse	\$27,354,392	\$359,575	\$406,131	\$1,784,154		
Totals	\$565,937,034	\$132,734,284	\$9,189,492	\$84,152,875		

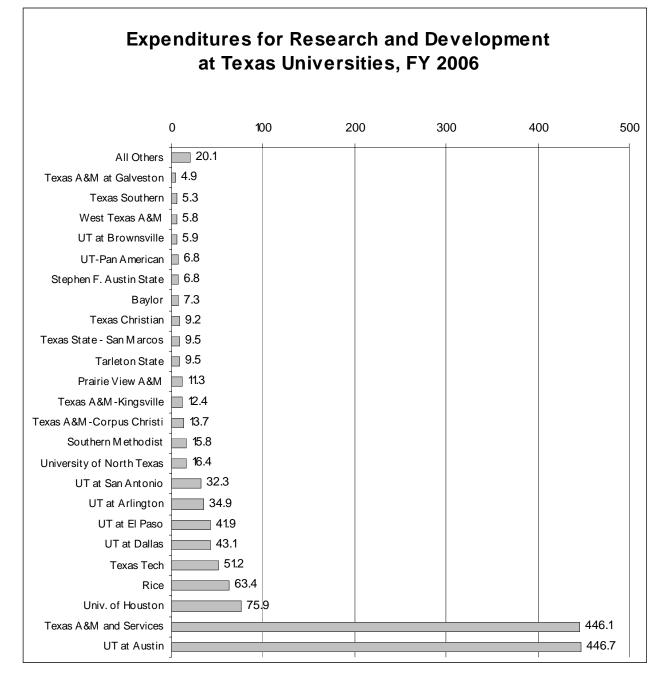
### Table 6 - continued

Expenditures for Conduct of Texas Hea	R&D in Areas	-	erest, FY 2006
	Pri	vate	Total
	Profit	Non-Profit	Totai
Aging	\$1,087,211	\$4,362,703	\$56,282,924
Cancer Research	\$35,408,163	\$68,487,149	\$557,019,393
Cardiovascular Research	\$6,184,806	\$22,583,816	\$126,611,682
Child Health and Human Development	\$3,981,357	\$10,797,657	\$120,892,142
Mental Health	\$5,611,958	\$5,293,867	\$65,101,979
Substance Abuse	\$1,120,529	\$900,381	\$31,925,162
Totals	\$53,394,024	\$112,425,573	\$957,833,282

## **INSTITUTIONAL DATA – UNIVERSITIES**

This section of the report contains detailed information on research expenditures reported by individual institutions. Statements related to data quality and applicability found on page 1 of this report also apply to the data shown in this section of the report.





Total Expendit		arch and Other of Funds, Texa		-	ored Program	ns		
					State			
Institution	Fede	eral	Approp	riated	Contracts	and Grants		
-	R&D	Other	R&D	Other	R&D	Other		
Midwestern State	\$0	\$0	\$0	\$0	\$0	\$0		
Stephen F. Austin State	\$3,739,260	\$0	\$1,032,072	\$0	\$314,737	\$0		
Texas A&M University System*								
Prairie View A&M	\$9,067,524	\$117,774	\$1,631,118	\$0	\$92,680	\$12,034		
Tarleton State	\$5,487,270	\$0	\$2,297,234	\$0	\$1,256,365	\$0		
Texas A&M and Services	\$200,756,607	\$600,574	\$92,163,197	\$916,695	\$36,468,540	\$227,251		
Texas A&M-Commerce	\$303,856	\$914	\$150,492	\$0	\$399,785	\$24,734		
Texas A&M-Corpus Christi	\$7,970,993	\$0	\$1,856,430	\$0	\$1,174,704	\$0		
Texas A&M at Galveston	\$2,974,076	\$0	\$626,605	\$296,485	\$368,181	\$0		
Texas A&M International	\$193,353	\$0	\$0	\$0	\$18,214	\$0		
Texas A&M-Kingsville	\$4,624,586	\$0	\$1,071,944	\$0	\$866,639	\$0		
Texas A&M-Texarkana	\$56,690	\$0	\$0	\$3,930	\$0	\$0		
West Texas A&M	\$2,693,769	\$0	\$2,250,461	\$2,012,466	\$102,122	\$0		
Texas Southern	\$4,797,144	\$0	\$0	\$0	\$392,587	\$0		
Texas State University System					. ,			
Angelo State	\$109,084	\$0	\$476,303	\$0	\$88,837	\$0		
Lamar	\$1,785,278	\$139,533	\$848,074	\$155,380	\$562,111	\$58.293		
Sam Houston State	\$1,118,465	\$0	\$203,134	\$0	\$542,604	\$0		
Sul Ross State	\$1,509,828	\$0 \$0	\$368,196	\$0 \$0	\$105,744	\$0		
Sul Ross - Rio Grande	\$0	\$0 \$0	\$3,409	\$0 \$0	\$0	\$0 \$0		
Texas State - San Marcos	\$1,930,534	\$0 \$0	\$1,228,778	\$0 \$0	\$1,902,774	\$0 \$0		
Texas Tech	\$23,321,205	\$0 \$0	\$12,597,643	\$0 \$0	\$4,541,090	\$0		
Texas Woman's	\$637,390	\$0 \$0	\$370,374	\$0 \$0	\$167,953	\$0 \$0		
University of Texas System	φοον,000	ψU	φ010,014	ψU	φ107,000	φυ		
UT at Arlington	\$19,095,309	\$0	\$10,224,182	\$0	\$1,311,815	\$0		
UT at Austin	\$294,832,202	\$0 \$0	\$25,557,370	\$0 \$0	\$26,100,358	\$0 \$0		
UT at Brownsville	\$5,131,456	\$0 \$0	\$197,694	\$0 \$0	\$30,000	\$0 \$0		
UT at Dallas	\$19,953,502	\$0 \$0	\$4,628,828	\$911,887	\$9,965,364	\$0 \$0		
UT at El Paso	\$26,821,331	\$0 \$0	\$8,850,292	\$0 \$0	\$1,025,312	\$0 \$0		
UT-Pan American	\$4,237,445	\$0 \$0	\$0,030,292 \$2,004,431	\$0 \$0	\$34,632	\$0 \$0		
		\$0 \$0		\$0 \$0		\$0 \$0		
UT of the Permian Basin UT at San Antonio	\$348,266 \$21,463,037	\$0 \$0	\$681,822 \$4,597,486	\$0 \$0	\$12,413 \$1 605 005	\$0 \$0		
	\$438,123	ەن \$15,789	\$4,397,480 \$0		\$1,605,095 \$107,016	\$0 \$167,395		
UT at Tyler	φ430, 123	\$15,769	φυ	\$0	\$197,916	\$107,395		
University of Houston System Univ. of Houston	¢40,420,207	¢o	¢11 401 071	<b>C</b> 2	Ф7 644 000	<u>م</u>		
Univ. of Houston-Clear Lake	\$40,439,387	\$0 \$0	\$11,421,971	\$0 \$0	\$7,641,328	\$0 \$0		
	\$315,272	\$0 \$0	\$588,845	\$0 ©0	\$89,635	\$0 \$0		
Univ. of Houston-Downtown	\$329,461	\$0	\$123,476	\$0	\$0	\$0		
Univ. of Houston-Victoria	\$0	\$0	\$0	\$0	\$0	\$0		
University of North Texas	\$9,030,177	\$0	\$555,564	\$0	\$749,160	\$0		
Independent Universities	<b>0</b> 000 044	<b>0</b> 4 000 0 0	<u></u>	<b>*</b> -	A-	<b>6</b> 000 <b>7</b> 5 1		
Abilene Christian	\$230,914	\$1,093,646	\$0	\$0	\$0	\$223,581		
Baylor Univ.	\$1,716,250	\$1,796,754	\$0	\$0	\$316,713	\$25,134		
Rice	\$54,464,975	\$8,843,550	\$0	\$0	\$1,479,475	\$118,897		
Southern Methodist	\$11,705,150	\$1,529,973	\$0	\$0	\$209,390	\$7,481		
St. Mary's	\$183,000	\$0	\$0	\$0	\$0	\$0		
Texas Christian	\$7,996,814	\$3,654,665	\$0	\$0	\$190,616	\$0		
Trinity	\$717,427	\$773,165	\$0	\$0	\$0	\$550		

Shading indicates the five highest in each category.

### Table 7 - continued

	tures for Resea by Source o	of Funds, Texa		-		
Institution	Institu	tion	Private,	Profit	Private, Non-Profit	
	R&D	Other	R&D	Other	R&D	Other
Midwestern State	\$0	\$0	\$0	\$0	\$67,146	\$0
Stephen F. Austin State	\$1,169,419	\$6,192	\$243,074	\$0	\$350,788	\$0
Texas A&M University System*						
Prairie View A&M	\$328,922	\$969,122	\$26,237	\$0	\$106,323	\$0
Tarleton State	\$75,812	\$0	\$59,268	\$0	\$345,584	\$0
Texas A&M and Services	\$69,558,944	\$2,178,160	\$23,318,859	\$1,050,338	\$23,845,957	\$76,89
Texas A&M-Commerce	\$0	\$0	\$154,042	\$48,595	\$173,992	\$123,13
Texas A&M-Corpus Christi	\$741,443	\$0	\$44,701	\$0	\$1,919,206	\$
Texas A&M at Galveston	\$263,362	\$47,434	\$32,604	\$0	\$624,604	\$6
Texas A&M International	\$25,266	\$0	\$0	\$0	\$0	\$
Texas A&M-Kingsville	\$2,677,627	\$0	\$258,057	\$0	\$2,935,474	\$
Texas A&M-Texarkana	\$0	\$0	\$0	\$0	<b>\$</b> 0	\$
West Texas A&M	\$0	\$0	\$364,007	\$0	\$405,316	\$0
Texas Southern	\$1,946	\$0	\$76,067	\$0	\$26,264	\$
Texas State University System						
Angelo State	\$0	\$0	\$42,226	\$0	\$36,059	\$
Lamar	\$6,274	\$184,776	\$9,031	\$1,512	\$66,738	\$38,45
Sam Houston State	\$1,180,551	\$0	\$27,800	\$0	\$70,383	\$
Sul Ross State	\$0	\$0	\$0	\$0	\$604,835	\$
Sul Ross - Rio Grande	\$0	\$0	\$0	\$0	\$0	\$
Texas State - San Marcos	\$3,044,499	\$0	\$104,618	\$0	\$1,286,342	\$
Texas Tech	\$1,793,667	\$602,815	\$5,638,560	\$0	\$3,268,739	\$
Texas Woman's	\$613,277	\$653,915	\$114,731	\$0	\$175,011	\$
University of Texas System	\$\$10,211	\$000,010	ФТТ I, I О Г	ψŬ	<i>Q</i> 170,011	Ŷ
UT at Arlington	\$112,581	\$0	\$2,761,004	\$0	\$1,360,177	\$
UT at Austin	\$37,219,810	\$0 \$0	\$38,984,120	\$0	\$23,992,743	\$
UT at Brownsville	\$424,470	\$0 \$0	\$0	\$0 \$0	\$106,824	\$
UT at Dallas	\$2,007,012	\$3,872,747	\$2,232,279	\$0 \$0	\$4,298,251	\$
UT at El Paso	\$2,655,959	\$3,754,013	\$318,807	\$0 \$0	\$2,261,481	φ \$
UT-Pan American	\$30,181	\$0	\$3,419	\$0 \$0	\$480,484	\$
UT of the Permian Basin	\$1,304,459	\$0 \$0	\$3,419 \$0	\$0 \$0	\$30,696	پہ (\$
UT at San Antonio	\$3,441,952	\$0 \$0	\$226,396	\$0 \$0	\$982,883	ې ډ
UT at Tyler	\$3,441,952	\$0 \$50,104	\$220,390 \$60,714	\$0 \$0	\$982,885 \$177,055	ۍ \$(
University of Houston System	φ41,210	φ50, 10 <del>4</del>	\$00,714	φU	\$177,000	Φ
Univ. of Houston	¢C 001 C07	¢o	¢2 206 170	¢0.	¢C 070 454	¢
Univ. of Houston-Clear Lake	\$6,891,687	\$0 \$0	\$3,396,170	\$0 ©0	\$6,079,454	\$
	\$83,064	\$0 \$0	\$10,884	\$0 ©0	\$126,277	\$
Univ. of Houston-Downtown	\$38,567	\$0	\$533	\$0 ©0	\$17,081	\$
Univ. of Houston-Victoria	\$0	\$0	\$0	\$0 ©0	\$0	\$
University of North Texas	\$3,440,573	\$0	\$904,503	\$0	\$1,697,524	\$
ndependent Universities	<b>*</b>				<b>•</b> • • • • • •	<b>•</b> · • · • ·
Abilene Christian	\$78,295	\$0	\$0	\$0	\$20,337	\$13,14
Baylor Univ.	\$1,811,605	\$0	\$2,196,013	\$375,776	\$1,233,556	\$708,44
Rice	\$2,422,190	(\$14,611)	\$1,573,783	\$0	\$3,470,105	\$906,05
Southern Methodist	\$2,577,590	\$976,828	\$361,755	\$46,684	\$969,301	\$489,93
St. Mary's	\$0	\$0	\$0	\$0	\$0	\$
Texas Christian	\$134,861	\$0	\$0	\$0	\$907,670	\$10,85
Trinity	\$37,466	\$22,393	\$0	\$0	\$477,399	\$1,334,72
Totals	\$146,234,547	\$13,303,888	\$83,544,262	\$1,522,905	\$84,998,059	\$3,701,70

Shading indicates the five highest in each category.

\* A&M agency and research foundation expenditures reported by individual affiliated university.

-	for Research and Other Re y Source of Funds, Texas I		red Programs
		Total	
Institution	R&D	Other	R&D and Other
Midwestern State	\$67,146	\$0	\$67,146
Stephen F. Austin State	\$6,849,350	\$6,192	\$6,855,542
Texas A&M University System*			
Prairie View A&M	\$11,252,804	\$1,098,930	\$12,351,734
Tarleton State	\$9,521,533	\$0	\$9,521,533
Texas A&M and Services	\$446,112,104	\$5,049,913	\$451,162,017
Texas A&M-Commerce	\$1,182,167	\$197,376	\$1,379,543
Texas A&M-Corpus Christi	\$13,707,477	\$0	\$13,707,477
Texas A&M at Galveston	\$4,889,432	\$343,984	\$5,233,416
Texas A&M International	\$236,833	\$0	\$236,833
Texas A&M-Kingsville	\$12,434,327	\$0	\$12,434,327
Texas A&M-Texarkana	\$56,690	\$3,930	\$60,620
West Texas A&M	\$5,815,675	\$2,012,466	\$7,828,141
Texas Southern	\$5,294,008	\$0	\$5,294,008
Texas State University System			
Angelo State	\$752,509	\$0	\$752,509
Lamar	\$3,277,506	\$577,945	\$3,855,451
Sam Houston State	\$3,142,937	\$0	\$3,142,937
Sul Ross State	\$2,588,603	\$0	\$2,588,603
Sul Ross - Rio Grande	\$3,409	\$0	\$3,409
Texas State - San Marcos	\$9,497,545	\$O	\$9,497,545
Texas Tech	\$51,160,904	\$602,815	\$51,763,719
Texas Woman's	\$2,078,736	\$653,915	\$2,732,651
University of Texas System			
UT at Arlington	\$34,865,068	\$0	\$34,865,068
UT at Austin	\$446,686,603	\$0	\$446,686,603
UT at Brownsville	\$5,890,444	\$O	\$5,890,444
UT at Dallas	\$43,085,236	\$4,784,634	\$47,869,870
UT at El Paso	\$41,933,182	\$3,754,013	\$45,687,195
UT-Pan American	\$6,790,592	\$0	\$6,790,592
UT of the Permian Basin	\$2,377,656	\$0	\$2,377,656
UT at San Antonio	\$32,316,849	\$0	\$32,316,849
UT at Tyler	\$915,024	\$233,288	\$1,148,312
University of Houston System			
Univ. of Houston	\$75,869,997	\$0	\$75,869,997
Univ. of Houston-Clear Lake	\$1,213,977	\$O	\$1,213,977
Univ. of Houston-Downtown	\$509,118	\$0	\$509,118
Univ. of Houston-Victoria	\$0	\$0	\$0
University of North Texas	\$16,377,501	\$0	\$16,377,501
Independent Universities			
Abilene Christian	\$329,546	\$1,330,376	\$1,659,922
Baylor Univ.	\$7,274,137	\$2,906,105	\$10,180,242
Rice	\$63,410,528	\$9,853,893	\$73,264,421
Southern Methodist	\$15,823,186	\$3,050,896	\$18,874,082
St. Mary's	\$183,000	\$0	\$183,000
Texas Christian	\$9,229,961	\$3,665,523	\$12,895,484
Trinity	\$1,232,292	\$2,130,832	\$3,363,124
Totals	\$1,396,235,592	\$42,257,026	\$1,438,492,618

Shading indicates the five highest in each category.

Federal R&D Expenditures/FTE Faculty Ratio, FY 2006 Texas Public Universities					
Institution	Federal R&D Expenditures	FTE Faculty*	Federal R&D Expenditures/FTE		
Midwestern State	\$0	154.50	\$0.00		
Stephen F. Austin State	\$3,739,260	349.58	\$10,696.44		
Texas A&M University System**	<i>\\\\\\\\\\\\\</i>	0.000	¢.0,000111		
Prairie View A&M	\$9,067,524	212.29	\$42,712.91		
Tarleton State	\$5,487,270	212.50	\$25,822.45		
Texas A&M and Services***	\$200,756,607	1,632.27	\$122,992.28		
Texas A&M-Commerce	\$303,856	193.75	\$1,568.29		
Texas A&M-Corpus Christi	\$7,970,993	182.44	\$43,691.04		
Texas A&M at Galveston	\$2,974,076	30.42	\$97,767.13		
Texas A&M International	\$193,353	133.83	\$1,444.77		
Texas A&M-Kingsville	\$4,624,586	210.25	\$21,995.65		
Texas A&M-Texarkana	\$56,690	46.66	\$1,214.96		
West Texas A&M	\$2,693,769	178.62	\$15,081.00		
Texas Southern	\$4,797,144	193.71	\$24,764.57		
Texas State University System	¢.,,		<i> </i>		
Angelo State	\$109,084	160.94	\$677.79		
Lamar	\$1,785,278	255.04	\$6,999.99		
Sam Houston State	\$1,118,465	366.08	\$3,055.25		
Sul Ross State	\$1,509,828	68.05	\$22,187.04		
Sul Ross - Rio Grande	\$0	23.83	\$0.00		
Texas State - San Marcos	\$1,930,534	435.68	\$4,431.08		
Texas Tech	\$23,321,205	892.47	\$26,131.08		
Texas Woman's	\$637,390	276.11	\$2,308.46		
University of Texas System	···· ,···	-	+ ,		
UT at Arlington	\$19,095,309	524.68	\$36,394.20		
UT at Austin	\$294,832,202	1,733.12	\$170,116.44		
UT at Brownsville	\$5,131,456	138.30	\$37,103.80		
UT at Dallas	\$19,953,502	304.02	\$65,632.20		
UT at El Paso	\$26,821,331	447.03	\$59,998.95		
UT-Pan American	\$4,237,445	397.47	\$10,661.04		
UT of the Permian Basin	\$348,266	87.75	\$3,968.84		
UT at San Antonio	\$21,463,037	472.84	\$45,391.75		
UT at Tyler	\$438,123	158.31	\$2,767.50		
University of Houston System	. , -		. ,		
Univ. of Houston	\$40,439,387	853.13	\$47,401.20		
Univ. of Houston-Clear Lake	\$315,272	178.99	\$1,761.39		
Univ. of Houston-Downtown	\$329,461	207.89	\$1,584.79		
Univ. of Houston-Victoria	\$0	64.80	\$0.00		
University of North Texas	\$9,030,177	696.28	\$12,969.17		
Totals	\$715,511,880	12,473.63	\$57,361.96		

\* FTE Faculty indicates number of full-time equivalents for tenured and tenure-track faculty for fall of 2005.

 $^{\star\star}$  A&M agency and research foundation expenditures reported by individual affiliated university.

\*\*\* FTE faculty for Texas A&M and Services is based on its Legislative Appropriations Request for FY 2006 and includes 197.8 FTEs from Texas Agricultural Experiment Station and 17.2 from Texas Engineering Experiment Station

Expenditures for Conduct of R&D by Field, FY 2006 Texas Universities							
Institution	Agricultural Sciences	Biological and Other Life Sciences	Computer Science	Engineering	Environmental Sciences	Mathematical Sciences	
Midwestern State	\$0	\$67,146	\$0	\$0	\$0	\$0	
Stephen F. Austin State	\$1,650,805	\$2,018,709	\$0	\$0	\$41,047	\$29,320	
Texas A&M University System*							
Prairie View A&M	\$5,692,507	\$336,654	\$89,389	\$3,714,559	\$0	\$111,740	
Tarleton State	\$5,108,994	\$38,477	\$2,580	\$15	\$2,162,088	\$132,875	
Texas A&M and Services	\$55,006,355	\$81,745,943	\$9,000,060	\$147,258,769	\$49,526,290	\$9,287,466	
Texas A&M-Commerce	\$94,459	\$27,121	\$195,727	\$22,313	\$0	\$234,940	
Texas A&M-Corpus Christi	\$7,699	\$394,659	\$494,188	\$241,019	\$5,607,679	\$1,822,652	
Texas A&M at Galveston	\$0	\$445,586	\$0	\$172,852	\$4,147,903	\$0	
Texas A&M International	\$0	\$20,959	\$0	\$0	\$82,666	\$0	
Texas A&M-Kingsville	\$6,074,649	\$2,409,794	\$0	\$1,798,762	\$1,367,189	\$0	
Texas A&M-Texarkana	\$0	\$0	\$0	\$0	\$0	\$0	
West Texas A&M	\$2,629,744	\$194,724	\$0	\$1,068,079	\$319,189	\$0	
Texas Southern	\$0	\$2,016,478	\$14,823	\$0	\$1,767	\$163,965	
Texas State University System							
Angelo State	\$469,670	\$103,110	\$1,388	\$0	\$0	\$6,512	
Lamar	\$0	\$6,791	\$17,128	\$1,946,392	\$767,862	\$0	
Sam Houston State	\$86,080	\$494,625	\$46,897	\$0	\$669,584	\$230,506	
Sul Ross State	\$427,260	\$157,837	\$0	\$0	\$1,089,377	\$0	
Sul Ross - Rio Grande	\$0	\$0	\$0	\$0	\$0	\$0	
Texas State - San Marcos	\$167,876	\$987,252	\$437,401	\$84,355	\$2,602,727	\$35,079	
Texas Tech	\$15,382,489	\$3,912,155	\$1,143,413	\$12,429,653	\$5,717,327	\$513,239	
Texas Woman's	\$0	\$1,069,584	\$0	\$0	\$0	\$26,470	
University of Texas System	• -	+ ,,	÷ -	, -	• -	+ -, -	
UT at Arlington	\$0	\$978,259	\$2,078,008	\$16,569,691	\$316,605	\$406,522	
UT at Austin	\$185,478	\$39,269,973	\$26,860,567	\$148,868,437	\$38,794,241	\$18,823,101	
UT at Brownsville	\$53,243	\$596,755	\$248,980	\$30,000	\$54,055	\$0	
UT at Dallas	\$0	\$4,163,798	\$6,398,866	\$14,414,150	\$654,411	\$127,177	
UT at El Paso	\$0	\$5,201,727	\$1,799,705	\$5,117,444	\$3,439,830	\$359,609	
UT-Pan American	\$27,906	\$474,964	\$188,036	\$2,036,900	\$134,021	\$93,237	
UT of the Permian Basin	\$0	\$73,674	\$0	\$0	\$2,952	\$1,029	
UT at San Antonio	\$0	\$15,125,898	\$774,036	\$2,915,287	\$1,140,186	\$51,053	
UT at Tyler	\$5,000	\$165,196	\$230,348	\$136,276	\$0	\$19,489	
University of Houston System	· · · · · ·	+,	+ ,	÷ ; -	• -	, ,	
Univ. of Houston	\$0	\$7,119,101	\$5,534,864	\$18,186,780	\$3,818,720	\$1,764,227	
Univ. of Houston-Clear Lake	\$0	\$191,363	\$49,346	\$54,064	\$250,391	\$45,351	
Univ. of Houston-Downtown	\$0	\$3,492	\$70,121	\$785	\$623	\$0	
Univ. of Houston-Victoria	\$0	\$0	\$0	\$0	\$0	\$0 \$0	
University of North Texas	\$53,699	\$2,635,823	\$409,385	\$5,128,091	\$1,168,614	\$206,922	
Independent Universities	<i><b>Q</b></i> <b>OOOOOOOOOOOOO</b>	\$2,000,020	<i><i><i>ϕ</i>ϕϕ</i></i>	<i>\$0,120,001</i>	\$1,100,011	<i> </i>	
Abilene Christian	\$5,380	\$5,267	\$0	\$0	\$0	\$0	
Baylor Univ.	\$0,500 \$0	\$1,966,081	\$228,665	\$547,372	\$979,321	\$62,102	
Rice	\$0 \$0	\$11,570,572	\$9,166,930	\$19,597,904	\$1,981,761	\$3,631,599	
Southern Methodist	\$0 \$0	\$2,207,053	\$686,694	\$1,935,756	\$2,821,334	\$605,951	
St. Mary's	\$0 \$0	\$2,207,053	\$000,094 \$0	\$1,935,750	\$2,821,334	\$005,951	
Texas Christian	\$0 \$0	<sub>40</sub> \$25,385	\$33,958	<sub>40</sub> \$74,113	\$0 \$112,191	\$0 \$0	
Trinity	\$0 \$0	\$433,483	\$33,958 \$0	\$14,052	\$22,026	\$100,008	
Totals	\$ <b>93,129,293</b>	\$188,655,468	\$66,201,503	\$404,363,870	\$129,793,977	\$100,008 \$38,892,141	
Shading indicates the five highest in eac		<i><i><i>ϕ</i></i>:00,000,<del>4</del>00</i>	<i>400,201,000</i>	¥+0+,000,070	w120,100,011	₩00,00 <b>2</b> ,141	

Shading indicates the five highest in each category.

### **Table 9 - continued**

Expenditures for Conduct of R&D by Field, FY 2006 Texas Universities						
Institution	Medical Sciences	Physical Sciences	Psychology	Social Sciences	Other Sciences	
Midwestern State	\$0	\$0	\$0	\$0	\$0	
Stephen F. Austin State	\$0	\$67,537	\$16,909	\$49,801	\$2,552,633	
Texas A&M University System*						
Prairie View A&M	\$19,687	\$1,165,095	\$1,626	\$0	\$0	
Tarleton State	\$430	\$63,663	\$0	\$855	\$0	
Texas A&M and Services	\$24,385,928	\$30,728,737	\$2,874,344	\$17,915,112	\$3,944,902	
Texas A&M-Commerce	\$1,008	\$239,003	\$21,671	\$700	\$0	
Texas A&M-Corpus Christi	\$2,273,349	\$436,795	\$36,188	\$144,214	\$447,329	
Texas A&M at Galveston	\$0	\$71,263	\$0	\$9,681	\$0	
Texas A&M International	\$0	\$0	\$0	\$0	\$11,898	
Texas A&M-Kingsville	\$0	\$250,444	\$0	\$0	\$82,302	
Texas A&M-Texarkana	\$0	\$0	\$0	\$0	\$0	
West Texas A&M	\$4,861	\$230,969	\$0	\$71,937	\$3,717	
Texas Southern	\$0	\$2,070,402	\$0	\$0	\$31,734	
Texas State University System						
Angelo State	\$59,951	\$17,669	\$20,174	\$0	\$0	
Lamar	\$0	\$88,531	\$4,411	\$0	\$0	
Sam Houston State	\$0	\$129,149	\$0	\$19,852	\$281,126	
Sul Ross State	\$0	\$0	\$0	\$914,129	\$0	
Sul Ross - Rio Grande	\$0	\$0	\$0	\$0	\$0	
Texas State - San Marcos	\$362,436	\$1,915,014	\$5,758	\$139,673	\$296,889	
Texas Tech	\$0	\$5,474,706	\$534,562	\$4,359,127	\$0	
Texas Woman's	\$424,181	\$84,707	\$12,952	\$6,940	\$350,638	
University of Texas System						
UT at Arlington	\$475,709	\$6,057,180	\$1,432,569	\$556,759	\$0	
UT at Austin	\$16,252,694	\$66,011,896	\$8,760,724	\$21,236,014	\$2,783,452	
UT at Brownsville	\$2,599,700	\$1,779,512	\$64,134	\$37,706	\$366,976	
UT at Dallas	\$1,053,772	\$8,894,309	\$3,561,165	\$1,748,624	\$592,398	
UT at El Paso	\$5,769,875	\$1,271,737	\$1,102,055	\$841,267	\$3,785,853	
UT-Pan American	\$1,505,301	\$102,201	\$250,596	\$192,944	\$0	
UT of the Permian Basin	\$0	\$1,412,752	\$2,000	\$0	\$97,442	
UT at San Antonio	\$0	\$2,780,739	\$195,247	\$417,580	\$2,798,162	
UT at Tyler	\$139,413	\$35,858	\$18,219	\$45,463	\$233	
University of Houston System	-					
Univ. of Houston	\$8,004,915	\$9,045,090	\$10,768,483	\$1,156,567	\$2,400,008	
Univ. of Houston-Clear Lake	\$0	\$136,233	\$34,705	\$7,347	\$0	
Univ. of Houston-Downtown	\$0	\$243,759	\$0	\$6,675	\$74,014	
Univ. of Houston-Victoria	\$0	\$0	\$0	\$0	\$0	
University of North Texas	\$19,819	\$2,505,857	\$208,427	\$1,284,249	\$0	
Independent Universities	,-	,	,			
Abilene Christian	\$0	\$257,529	\$4,800	\$0	\$0	
Baylor Univ.	\$0	\$1,340,145	\$247,625	\$169,369	\$0	
Rice	\$0	\$15,003,230	\$748,668	\$584,175	\$0	
Southern Methodist	\$0	\$2,086,713	\$1,215,225	\$586,850	\$329,258	
St. Mary's	\$0	\$0	\$0	\$0	\$020,200 \$0	
Texas Christian	\$269,437	\$1,155,690	\$2,392,597	\$158,206	\$23,290	
Trinity	\$0	\$561,523	\$70,553	\$4,722	\$20,250 \$0	
Totals	\$63,622,466		\$34,606,387	\$52,666,538	\$21,254,254	

Shading indicates the five highest in each category.

### Table 9 - continued

Expenditures for Conduct of R&D by Field, FY 2006 Texas Universities						
Institution	Arts and Humanities	Business Administration	Education	Law and Public Administration	Other Non- Sciences	Total
Midwestern State	\$0	\$0	\$0	\$0	\$0	\$67,146
Stephen F. Austin State	\$82,301	\$17,660	\$57,576	\$0	\$265,052	\$6,849,350
Texas A&M University System*						
Prairie View A&M	\$46,430	\$4,044	\$71,073	\$0	\$0	\$11,252,804
Tarleton State	\$21,814	\$13,972	\$127,790	\$0	\$1,847,980	\$9,521,533
Texas A&M and Services	\$291,845	\$2,799,052	\$11,246,158	\$24,451	\$76,692	\$446,112,104
Texas A&M-Commerce	\$17,495	\$892	\$245,682	\$558	\$80,598	\$1,182,167
Texas A&M-Corpus Christi	\$45,275	\$12,883	\$972,763	\$0	\$770,785	\$13,707,477
Texas A&M at Galveston	\$2,559	\$0	\$0	\$10,763	\$28,825	\$4,889,432
Texas A&M International	\$15,079	\$3,175	\$92,679	\$9,835	\$542	\$236,833
Texas A&M-Kingsville	\$0	\$0	\$50,356	\$0	\$400,831	\$12,434,327
Texas A&M-Texarkana	\$0	\$0	\$56,690	\$0	\$0	\$56,690
West Texas A&M	\$0	\$933,137	\$204,775	\$0	\$154,543	\$5,815,675
Texas Southern	\$0	\$8,000	\$378,342	\$0	\$608,497	\$5,294,008
Texas State University System						
Angelo State	\$2,034	\$624	\$43,837	\$8,917	\$18,623	\$752,509
Lamar	\$0	\$0	\$1,183	\$0	\$445,208	\$3,277,506
Sam Houston State	\$54,227	\$7,340	\$95,804	\$15,278	\$1,012,469	\$3,142,937
Sul Ross State	\$0	\$0	\$0	\$0	\$0	\$2,588,603
Sul Ross - Rio Grande	\$3,270	\$0 \$0	\$139	\$0	\$0	\$3,409
Texas State - San Marcos	\$198,463	\$26,202	\$453,178	\$287,020	\$1,498,222	\$9,497,545
Texas Tech	\$74,130	\$555,656	\$1,007,282	\$57,165	\$0	\$51,160,904
Texas Woman's	\$0	\$11,408	\$27,967	\$0	\$63,889	\$2,078,736
University of Texas System	ψũ	ψ11,100	<i><b>4</b>21,001</i>	<b>\$</b>	\$00,000	<i>\\\\\\\\\\\\\</i>
UT at Arlington	\$132,738	\$130,497	\$102,894	\$269,927	\$5,357,710	\$34,865,068
UT at Austin	\$3,572,527	\$4,300,834	\$29,070,287	\$1,310,527	\$20,585,851	\$446,686,603
UT at Brownsville	\$0	\$0	\$34,268	\$0	\$25,115	\$5,890,444
UT at Dallas	\$406,485	\$1,055,869	\$14,212	\$0	\$0	\$43,085,236
UT at El Paso	\$104,548	\$5,349	\$6,967,946	\$559,849	\$5,606,388	\$41,933,182
UT-Pan American	\$128,593	\$16,741	\$1,148,326	\$490,826	\$0	\$6,790,592
UT of the Permian Basin	\$18,398	\$338,016	\$287,118	\$0	\$144,275	\$2,377,656
UT at San Antonio	\$1,435,970	\$616,745	\$1,515,283	\$2,550,663	\$0	\$32,316,849
UT at Tyler	\$1,435,970	\$4,741	\$61,421	\$2,550,005	\$53,367	\$915,024
University of Houston System	\$0	φ4,741	\$01,421	\$0	<i>400,007</i>	\$913,024
Univ. of Houston	\$423,494	\$54.046	\$4,416,595	\$240,315	\$2,935,892	\$75,869,997
Univ. of Houston-Clear Lake		\$54,946 \$78,087				
Univ. of Houston-Downtown	\$6,119 ¢0		\$15,687	\$0 \$0	\$345,284 \$100,480	\$1,213,977
	\$0 ©	\$0	\$160 ¢0	\$0	\$109,489	\$509,118
Univ. of Houston-Victoria	\$0	\$0	\$0	\$0	\$0 ©0	\$0
University of North Texas	\$301,388	\$1,711,925	\$458,386	\$284,916	\$0	\$16,377,501
Independent Universities	<b>A</b> A <b></b> -	<b>A</b> AA <b>-</b> A-	<b>AC</b> 10-	<b>^</b> -	<b>#</b> 40.00-	<b>#000 - 1</b>
Abilene Christian	\$8,776	\$20,500	\$9,198	\$0	\$18,096	\$329,546
Baylor Univ.	\$1,089,289	\$60,617	\$66,200	\$0	\$517,351	\$7,274,137
Rice	\$834,243	\$175,373	\$49,916	\$0	\$66,157	\$63,410,528
Southern Methodist	\$129,316	\$162,898	\$2,302,595	\$654,155	\$99,388	\$15,823,186
St. Mary's	\$0	\$0	\$0	\$0	\$183,000	\$183,000
Texas Christian	\$155,844	\$3,861	\$1,159,866	\$0	\$3,665,523	\$9,229,961
Trinity	\$25,925	\$0	\$0	\$0	\$0	\$1,232,292
Totals Shading indicates the five highest in eac	\$9,628,575	\$13,131,044	\$62,813,632	\$6,775,165	\$46,985,642	\$1,396,235,592

Shading indicates the five highest in each category.

Expenditures for		f R&D by Area xas Universitie	-	Interest, FY 2	006
Institution	Aerospace Technology	Biotechnology	Energy	Environmental Sciences	Food, Fiber, Agricultural Products
Midwestern State	\$0	\$0	\$0	\$0	\$0
Stephen F. Austin State	\$0	\$1,111,498	\$0	\$4,289,704	\$1,565,825
Texas A&M University System*					
Prairie View A&M	\$0	\$0	\$0	\$0	\$71,065
Tarleton State	\$0	\$0	\$0	\$63,618	\$3,612,694
Texas A&M and Services	\$2,464,386	\$52,428,735	\$3,803,181	\$8,105,912	\$62,298,749
Texas A&M-Commerce	\$0	\$0	\$0	\$0	\$94,457
Texas A&M-Corpus Christi	\$127,180	\$82,117	\$0	\$2,715,669	\$7,699
Texas A&M at Galveston	\$0	\$0	\$0	\$1,139,569	\$0
Texas A&M International	\$0	\$0	\$0	\$4,526	\$0
Texas A&M-Kingsville	\$0	\$2,280,933	\$39,785	\$1,085,631	\$1,605,964
Texas A&M-Texarkana	\$0	\$0	\$0	\$0	\$0
West Texas A&M	\$0	\$50,770	\$298,118	\$537,512	\$1,934,279
Texas Southern	\$0	\$0	\$0	\$1,767	\$0
Texas State University System	• -	• -	<b>,</b>	÷ ) -	<b>,</b>
Angelo State	\$0	\$0	\$0	\$0	\$449,922
Lamar	\$0	\$0	\$9,334	\$1,231,282	\$0
Sam Houston State	\$0 \$0	\$0	\$0	\$10,342	\$0
Sul Ross State	\$0 \$0	\$0	\$0 \$0	\$45,007	\$0
Sul Ross - Rio Grande	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0
Texas State - San Marcos	\$0 \$0	\$891,603	\$0 \$0	\$1,119,928	\$167,876
Texas Tech	\$1,418,218	\$4,733,781	\$3,123,062	\$7,807,900	\$14,876,829
Texas Woman's	\$0	\$0	\$0,120,002	\$0	\$304,470
University of Texas System	ψυ	ψυ	ψυ	φ0	\$304,470
UT at Arlington	\$548,295	\$1,839,643	\$3,561,331	\$1,341,118	\$0
UT at Austin	\$10,220,164	\$21,332,533	\$36,211,815	\$39,868,829	\$314,597
UT at Brownsville	\$1,586,729		\$38,516	\$39,000,029	\$314,397 \$0
UT at Dallas	\$1,586,729	\$3,194,143 \$351,849	\$36,510 \$0	<del>پ</del> وں \$510,547	\$0 \$0
UT at El Paso	\$103,974 \$0	\$331,849	\$23,612	\$1,637,668	\$0 \$0
UT-Pan American		\$0 \$0			
UT of the Permian Basin	\$0 \$0		\$0 \$270,189	\$134,021 \$9	\$27,906 \$0
		\$66,148	\$270,188		
UT at San Antonio	\$0 \$0	\$1,349,740	\$0 ©	\$1,140,186	\$0 \$0
UT at Tyler	\$0	\$0	\$0	\$0	\$0
University of Houston System Univ. of Houston	\$1,861,143	¢0.010.051	¢0.000.405	¢1 656 200	¢0.
		\$2,319,951	\$2,329,485	\$1,656,322	\$0 \$0
Univ. of Houston-Clear Lake	\$85,703	\$0	\$0 \$0	\$250,391	\$0 \$0
Univ. of Houston-Downtown	\$0 \$0	\$33,764	\$0 \$0	\$0 \$0	\$0 \$0
Univ. of Houston-Victoria	\$0	\$0	\$0	\$0	\$0
University of North Texas	\$924	\$307,310	\$93,939	\$1,000,725	\$63,657
Independent Universities	<b>\$</b> 0	<b>•</b> ••	<b>\$</b> 000.044		<b>.</b>
Abilene Christian	\$0 \$0	\$0	\$230,914	\$0	\$0 \$0
Baylor Univ.	\$0	\$0	\$0	\$431,493	\$0
Rice	\$190,091	\$11,349,108	\$666,646	\$3,848,477	\$0
Southern Methodist	\$0 \$0	\$0	\$0 \$0	\$0	\$0
St. Mary's	\$0	\$183,000	\$0	\$0	\$0
Texas Christian	\$0	\$0	\$0	\$0	\$0
Trinity	\$0	\$168,377	\$2,256	\$0	\$0
Totals	\$18,688,807	\$104,075,003	\$50,702,182	\$79,978,153	\$87,395,989

Shading indicates the five highest in each category.

Г

\* A&M agency and research foundation expenditures reported by individual affiliated university.

-

### Table 10 - continued

Expenditures for Conduct of R&D by Area of Special Interest, FY 2006 Texas Universities						
Institution	Manufacturing Technology	Materials Science	Microelectronics and Computer Technology	Water Resources	Total	
Midwestern State	\$0	\$0	\$0	\$0	\$0	
Stephen F. Austin State	\$0	\$0	\$0	\$3,892,273	\$10,859,300	
Texas A&M University System*						
Prairie View A&M	\$0	\$0	\$0	\$0	\$71,065	
Tarleton State	\$0	\$0	\$0	\$978,629	\$4,654,941	
Texas A&M and Services	\$3,217,117	\$7,757,050	\$8,817,664	\$6,189,054	\$155,081,848	
Texas A&M-Commerce	\$22,313	\$57,142	\$244,300	\$0	\$418,212	
Texas A&M-Corpus Christi	\$0	\$0	\$1,774,479	\$646,097	\$5,353,241	
Texas A&M at Galveston	\$0	\$0	\$0	\$0	\$1,139,569	
Texas A&M International	\$0	\$0	\$0	\$0	\$4,526	
Texas A&M-Kingsville	\$0	\$9,161	\$0	\$0	\$5,021,474	
Texas A&M-Texarkana	\$0	\$0	\$0	\$0	\$0	
West Texas A&M	\$0	\$48,917	\$0	\$88,116	\$2,957,712	
Texas Southern	\$0	\$172,459	\$0	\$0	\$174,226	
Texas State University System		. ,				
Angelo State	\$0	\$0	\$0	\$49,115	\$499,037	
Lamar	\$948,449	\$0	\$29,538	\$170,135	\$2,388,738	
Sam Houston State	\$0	\$0	\$63,709	\$652,114	\$726,165	
Sul Ross State	\$0	\$0	\$0	\$0	\$45,007	
Sul Ross - Rio Grande	\$0 \$0	\$0 \$0	\$0	\$0	\$0	
Texas State - San Marcos	\$0 \$0	\$1,915,014	\$437,398	\$1,506,589	\$6,038,408	
Texas Tech	\$1,309,107	\$3,103,396	\$1,846,369	\$3,093,172	\$41,311,834	
Texas Woman's	\$0	\$0	\$0	\$0	\$304,470	
University of Texas System	ΨŬ	ψu	ψŬ	ψũ	<i>\$66</i> 1, 11 6	
UT at Arlington	\$4,149,358	\$2,702,090	\$4,147,073	\$300,678	\$18,589,586	
UT at Austin	\$925,238	\$15,786,110	\$36,495,159	\$2,544,833	\$163,699,278	
UT at Brownsville	\$0	\$0	\$0	\$13,134	\$4,832,522	
UT at Dallas	\$0 \$0	\$1,012,365	\$974,933	\$0	\$3,035,668	
UT at El Paso	\$506,349	\$383,708	\$32,159	\$134,659	\$2,718,155	
UT-Pan American	\$674,619	\$0	\$188,036	\$0 \$0	\$1,024,582	
UT of the Permian Basin	\$07 <i>4</i> ,015	\$0 \$0	\$100,050	\$0 \$0	\$336,345	
UT at San Antonio	\$0 \$0	\$457,272	\$774,036	\$165,554	\$3,886,788	
UT at Tyler	\$0 \$0	\$0 \$0	\$0	\$0	\$0,000,700	
University of Houston System	ΨŬ	ψυ	ΨΟ	ψυ	Ψ	
Univ. of Houston	\$676,410	\$3,865,673	\$4,823,435	\$932	\$17,533,351	
Univ. of Houston-Clear Lake	\$070,410 \$0	\$0,000,070	\$103,409	\$0 \$0	\$439,503	
Univ. of Houston-Downtown	\$0 \$0	\$0 \$0	\$11,957	\$0 \$0	\$45,721	
Univ. of Houston-Victoria	\$0 \$0	\$0 \$0	\$11,957	\$0 \$0	\$45,721	
University of North Texas	ەن \$106,520	\$4,462,263	<del>پ</del> 0 \$1,172,146	ە <del>پ</del> 0 \$209,194	<sub>40</sub> \$7,416,678	
Independent Universities	φ100,520	ψ4,402,203	φ1,172,140	φ209,194	φι,410,078	
Abilene Christian	\$0	\$0	\$0	\$0	¢220.04.4	
					\$230,914 \$1 247 119	
Baylor Univ.	\$0 \$0	\$332,194	\$0	\$583,431	\$1,347,118	
Rice	\$0 \$0	\$2,177,878	\$12,150,412	\$0 \$0	\$30,382,612	
Southern Methodist	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	
St. Mary's	\$0	\$0 \$0	\$0	\$0 \$0	\$183,000	
Texas Christian	\$0	\$0 \$0	\$0 \$0	\$0	\$0	
Trinity	\$0 \$12 525 480	\$0 \$44 242 602	\$0 \$74.086.212	\$0 \$21 217 700	\$170,633	
Totals Shading indicates the five highest in eac	\$12,535,480	\$44,242,692	\$74,086,212	\$21,217,709	\$492,922,227	

Shading indicates the five highest in each category.

## **INSTITUTIONAL DATA – HEALTH-RELATED INSTITUTIONS**

This section of the report contains detailed information on research expenses reported by individual health-related institutions. Nine of Texas' 10 health-related institutions are public institutions. The sole independent higher education health-related institution is Baylor College of Medicine. Statements related to data quality and applicability found on page 1 of this report also apply to the data shown in this section of the report.

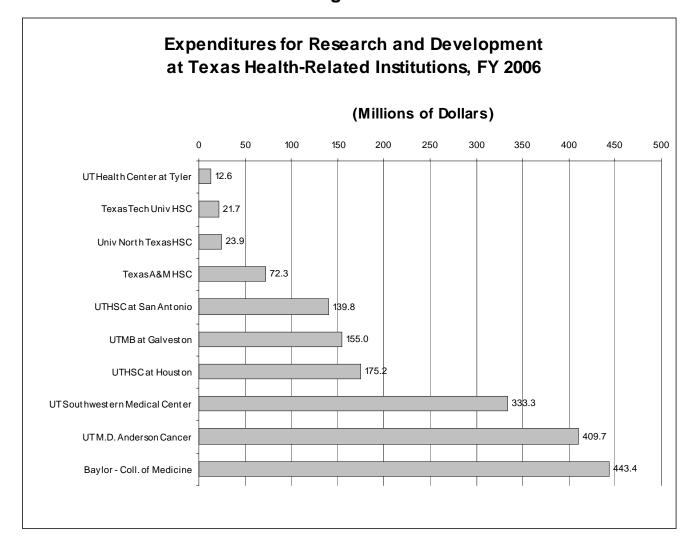


Figure 7

Total Expenditures for Research and Other Research-Related Sponsored Programs
by Source of Funds, Texas Health-Related Institutions, FY 2006

	<b>F</b> adar		State Appropriated Contracts and Gran			
Institution	Feder	a				nd Grants
	R&D	Other	R&D	Other	R&D	Other
Baylor - Coll. of Medicine	\$287,678,891	\$0	\$3,219,928	\$0	\$3,376,574	\$0
Texas A&M HSC	\$35,213,635	\$0	\$12,759,940	\$0	\$1,502,389	\$0
Texas Tech Univ HSC	\$9,712,580	\$0	\$6,878,470	\$0	\$317,486	\$0
Univ North Texas HSC	\$19,183,193	\$37,207	\$0	\$0	\$98,503	\$0
UT M.D. Anderson Cancer	\$182,028,411	\$0	\$121,681,394	\$0	\$932	\$0
UTMB at Galveston	\$120,407,805	\$0	\$10,527,417	\$0	\$881,862	\$0
UTHSC at Houston	\$122,870,079	\$0	\$11,398,537	\$0	\$14,526,287	\$0
UT Health Center at Tyler	\$6,512,656	\$0	\$2,474,104	\$0	\$0	\$0
UTHSC at San Antonio	\$95,110,395	\$0	\$7,335,908	\$0	\$357,963	\$0
UT Southwestern Medical Center	\$196,622,021	\$2,732,112	\$32,815,024	\$0	\$1,124,509	\$0
Totals	\$1,075,339,666	\$2,769,319	\$209,090,722	\$0	\$22,186,505	\$0

Shading indicates the five highest in each category.

### Table 11 - continued

Total Expenditures for Research and Other Research-Related Sponsored Programs	
by Source of Funds, Texas Health-Related Institutions, FY 2006	

Institution	Institu	ution	Private	vate, Profit Private, Non-Pro		
	R&D	Other	R&D	Other	R&D	Other
Baylor - Coll. of Medicine	\$109,300,909	\$0	\$16,465,458	\$0	\$23,323,896	\$0
Texas A&M HSC	\$8,888,144	\$0	\$5,466,985	\$0	\$8,495,466	\$0
Texas Tech Univ HSC	\$1,860,477	\$0	\$1,115,624	\$0	\$1,780,459	\$0
Univ North Texas HSC	\$1,209,528	\$2,437,572	\$1,401,233	\$5,048	\$1,975,097	\$17,159
UT M.D. Anderson Cancer	\$28,269,580	\$0	\$28,020,075	\$0	\$49,679,319	\$0
UTMB at Galveston	\$1,097,254	\$0	\$5,870,368	\$0	\$16,251,496	\$0
UTHSC at Houston	\$1,682,391	\$0	\$8,624,632	\$0	\$16,051,882	\$0
UT Health Center at Tyler	\$2,020,783	\$0	\$365,700	\$0	\$1,225,628	\$0
UTHSC at San Antonio	\$11,495,433	\$0	\$16,343,210	\$0	\$9,135,823	\$0
UT Southwestern Medical Center	\$13,766,930	\$852,519	\$15,073,064	\$0	\$73,854,614	\$0
Totals	\$179,591,429	\$3,290,091	\$98,746,349	\$5,048	\$201,773,680	\$17,159

Shading indicates the five highest in each category.

Г

### Table 11 - continued

Total Expenditures for Research and Other Research-Related Sponsored Programs by Source of Funds, Texas Health-Related Institutions, FY 2006						
Institution		Total				
	R&D	Other	Total			
Baylor - Coll. of Medicine	\$443,365,656	\$0	\$443,365,656			
Texas A&M HSC	\$72,326,559	\$0	\$72,326,559			
Texas Tech Univ HSC	\$21,665,096	\$0	\$21,665,096			
Univ North Texas HSC	\$23,867,554	\$2,496,986	\$26,364,540			
UT M.D. Anderson Cancer	\$409,679,711	\$0	\$409,679,711			
UTMB at Galveston	\$155,036,202	\$0	\$155,036,202			
UTHSC at Houston	\$175,153,808	\$0	\$175,153,808			
UT Health Center at Tyler	\$12,598,871	\$0	\$12,598,871			
UTHSC at San Antonio	\$139,778,732	\$0	\$139,778,732			
UT Southwestern Medical Center	\$333,256,162	\$3,584,631	\$336,840,793			
Totals	\$1,786,728,351	\$6,081,617	\$1,792,809,968			

Shading indicates the five highest in each category.

Expenditures for Conduct of R&D by Field, FY 2006 Texas Health-Related Institutions								
Institution	Agricultural Sciences	Biological and Other Life Sciences	Engineering	Environmental Sciences	Mathematical Sciences			
Baylor - Coll. of Medicine	\$0	\$215,872,800	\$0	\$0	\$0			
Texas A&M HSC	\$6,761	\$65,931	\$761,888	\$1,056,243	\$0			
Texas Tech Univ HSC	\$0	\$10,696,292	\$0	\$0	\$0			
Univ North Texas HSC	\$0	\$18,645,657	\$0	\$0	\$0			
UT M.D. Anderson Cancer	\$0	\$135,112,964	\$3,088,752	\$0	\$19,400,213			
UTMB at Galveston	\$0	\$59,730,903	\$2,201,321	\$0	\$0			
UTHSC at Houston	\$0	\$27,953,469	\$0	\$0	\$0			
UT Health Center at Tyler	\$1,121,683	\$0	\$0	\$39,977	\$0			
UTHSC at San Antonio	\$0	\$0	\$0	\$0	\$0			
UT Southwestern Medical Center	\$0	\$163,647,092	\$0	\$0	\$0			
Totals	\$1,128,444	\$631,725,108	\$6,051,961	\$1,096,220	\$19,400,213			

Shading indicates the five highest in each category.

### Table 12 - continued

Expenditures for Conduct of R&D by Field, FY 2006 Texas Health-Related Institutions							
Institution Medical Sciences Psychology Social Other Sciences Total							
Baylor - Coll. of Medicine	\$227,492,856	\$0	\$0	\$0	\$0	\$443,365,656	
Texas A&M HSC	\$70,298,056	\$138	\$71,952	\$65,590	\$0	\$72,326,559	
Texas Tech Univ HSC	\$10,968,804	\$0	\$0	\$0	\$0	\$21,665,096	
Univ North Texas HSC	\$5,221,897	\$0	\$0	\$0	\$0	\$23,867,554	
UT M.D. Anderson Cancer	\$225,145,378	\$9,664,389	\$12,201,058	\$5,066,957	\$0	\$409,679,711	
UTMB at Galveston	\$93,103,978	\$0	\$0	\$0	\$0	\$155,036,202	
UTHSC at Houston	\$147,200,339	\$0	\$0	\$0	\$0	\$175,153,808	
UT Health Center at Tyler	\$11,437,211	\$0	\$0	\$0	\$0	\$12,598,871	
UTHSC at San Antonio	\$139,778,732	\$0	\$0	\$0	\$0	\$139,778,732	
UT Southwestern Medical Center	\$167,919,833	\$0	\$0	\$0	\$1,689,237	\$333,256,162	
Totals	\$1,098,567,084	\$9,664,527	\$12,273,010	\$5,132,547	\$1,689,237	\$1,786,728,351	

Shading indicates the five highest in each category.

Expenditures for Research and Development by Area of Special Interest, FY 2006 Texas Public Health-Related Institutions							
Institution Aging Cancer Cardiovascular Research Cardiovascular Developm							
Baylor - Coll. of Medicine	\$10,205,359	\$72,379,542	\$40,964,435	\$70,235,786			
Texas A&M HSC	\$1,182,024	\$5,518,471	\$8,460,212	\$6,125,751			
Texas Tech Univ HSC	\$2,530,483	\$5,589,151	\$2,253,889	\$2,810,278			
Univ North Texas HSC	\$5,245,069	\$1,322,772	\$2,794,188	\$0			
UT M.D. Anderson Cancer	\$0	\$409,679,711	\$0	\$0			
UTMB at Galveston	\$13,490,725	\$9,641,120	\$4,711,382	\$9,568,428			
UTHSC at Houston	\$1,362,636	\$4,012,764	\$15,460,866	\$14,779,326			
UT Health Center at Tyler	\$0	\$176,937	\$0	\$0			
UTHSC at San Antonio	\$15,932,875	\$17,227,670	\$13,646,851	\$8,474,704			
UT Southwestern Medical Center	\$6,333,753	\$31,471,255	\$38,319,859	\$8,897,869			
Totals	\$56,282,924	\$557,019,393	\$126,611,682	\$120,892,142			

Shading indicates the five highest in each category.

### Table 13 - continued

Expenditures for Research and Development by Area of Special Interest, FY 2006 Texas Public Health-Related Institutions						
Institution	Mental Health	Substance Abuse	Total			
Baylor - Coll. of Medicine	\$22,209,490	\$6,117,248	\$222,111,860			
Texas A&M HSC	\$386,498	\$1,650,394	\$23,323,350			
Texas Tech Univ HSC	\$1,053,885	\$1,452,337	\$15,690,023			
Univ North Texas HSC	\$1,400,723	\$1,122,068	\$11,884,820			
UT M.D. Anderson Cancer	\$0	\$0	\$409,679,711			
UTMB at Galveston	\$7,760,831	\$2,190,985	\$47,363,471			
UTHSC at Houston	\$7,359,581	\$7,200,167	\$50,175,340			
UT Health Center at Tyler	\$0	\$0	\$176,937			
UTHSC at San Antonio	\$10,669,032	\$5,550,243	\$71,501,375			
UT Southwestern Medical Center	\$14,261,939	\$6,641,720	\$105,926,395			
Totals	\$65,101,979	\$31,925,162	\$957,833,282			

Shading indicates the five highest in each category.

## HISTORICAL DATA FOR PUBLIC INSTITUTIONS

Figure 8 graphs total research and development expenditures since 1986. The accelerated growth in research expenditures for the public health-related institutions from 1999 to 2003 resulted primarily from the doubling of the National Institutes of Health budget, a major source of research funding.

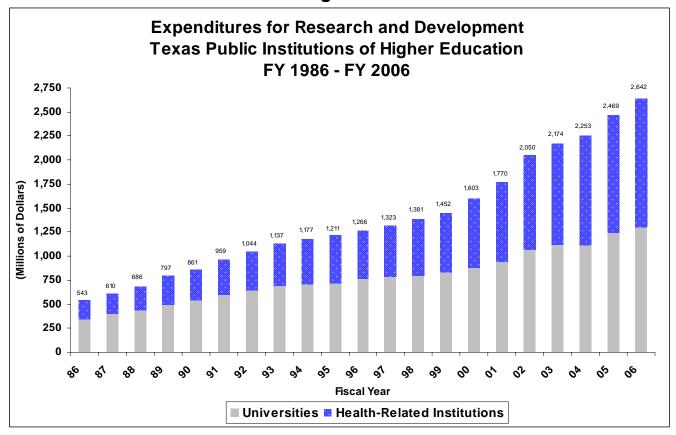




Table 14 on the following page shows total research and development expenditures at Texas public universities over the past four years. Table 15 shows federal research and development expenditures and the ratio of federal-to-state research and development expenditures over the past four years. Tables 16 and 17 show similar data for health-related institutions. One-year and five-year changes in federal expenditures for research and development for the different disciplines are shown in Table 18.

Expenditures for Research and Development Texas Public Universities							
Institution	FY 2003	FY 2004	FY 2005	FY 2006	Percent Change*		
Midwestern State	\$85,760	\$119,653	\$87,980	\$67,146	-21.70%		
Stephen F. Austin State	\$5,491,566	\$3,639,457	\$4,302,941	\$6,849,350	24.72%		
Texas A&M University System							
Prairie View A&M	\$10,682,633	\$10,697,128	\$10,919,521	\$11,252,804	5.34%		
Tarleton State	\$8,229,694	\$8,579,202	\$9,903,767	\$9,521,533	15.70%		
Texas A&M and Services	\$390,305,058	\$390,654,670	\$434,864,259	\$446,112,104	14.30%		
Texas A&M-Commerce	\$520,321	\$609,864	\$1,098,153	\$1,182,167	127.20%		
Texas A&M-Corpus Christi	\$12,110,618	\$13,682,911	\$12,073,070	\$13,707,477	13.19%		
Texas A&M at Galveston	\$4,949,454	\$4,537,645	\$5,305,098	\$4,889,432	-1.21%		
Texas A&M International	\$570,457	\$185,137	\$250,332	\$236,833	-58.48%		
Texas A&M-Kingsville	\$10,148,177	\$10,536,809	\$12,626,504	\$12,434,327	22.53%		
Texas A&M-Texarkana	\$116,913	\$188,653	\$199,617	\$56,690	-51.51%		
West Texas A&M	\$6,221,085	\$5,503,151	\$4,572,604	\$5,815,675	-6.52%		
Texas Southern	\$3,872,628	\$4,647,980	\$5,088,035	\$5,294,008	36.70%		
Texas State University System							
Angelo State	\$699,836	\$885,426	\$714,754	\$752,509	7.53%		
Lamar	\$3,958,697	\$3,210,250	\$3,375,467	\$3,277,506	-17.21%		
Sam Houston State	\$1,829,162	\$2,858,129	\$3,176,943	\$3,142,937	71.82%		
Sul Ross State	\$816,917	\$1,058,664	\$2,376,399	\$2,588,603	216.87%		
Sul Ross - Rio Grande	\$21,610	\$3,506	\$0	\$3,409	-84.22%		
Texas State - San Marcos	\$9,112,931	\$9,129,998	\$8,897,766	\$9,497,545	4.22%		
Texas Tech	\$56,147,235	\$48,142,661	\$48,462,797	\$51,160,904	-8.88%		
Texas Woman's	\$2,998,340	\$2,233,085	\$1,927,385	\$2,078,736	-30.67%		
University of Texas System							
UT at Arlington	\$23,314,938	\$22,417,130	\$33,826,960	\$34,865,068	49.54%		
UT at Austin	\$376,403,651	\$382,391,771	\$422,867,712	\$446,686,603	18.67%		
UT at Brownsville	\$1,558,306	\$3,273,326	\$5,374,665	\$5,890,444	278.00%		
UT at Dallas	\$32,547,141	\$31,274,590	\$43,110,799	\$43,085,236	32.38%		
UT at El Paso	\$27,847,152	\$32,067,735	\$36,013,585	\$41,933,182	50.58%		
UT-Pan American	\$3,193,419	\$4,309,262	\$5,816,164	\$6,790,592	112.64%		
UT of the Permian Basin	\$1,118,184	\$1,895,564	\$1,160,694	\$2,377,656	112.64%		
UT at San Antonio	\$14,547,732	\$16,516,457	\$23,605,844	\$32,316,849	122.14%		
UT at Tyler	\$411,275	\$894,034	\$501,301	\$915,024	122.48%		
University of Houston System		. ,		. ,			
Univ. of Houston	\$88,608,021	\$75,927,432	\$81,453,186	\$75,869,997	-14.38%		
Univ. of Houston-Clear Lake	\$1,707,440	\$1,211,307	\$1,367,443	\$1,213,977	-28.90%		
Univ. of Houston-Downtown	\$678,068	\$669,019	\$563,252	\$509,118	-24.92%		
Univ. of Houston-Victoria	\$0	\$0	\$4,443	\$0	NA		
University of North Texas	\$17,587,767	\$15,636,344	\$16,801,061	\$16,377,501	-6.88%		
Totals	\$1,118,412,186	\$1,109,587,950	\$1,242,690,501	\$1,298,752,942	16.12%		

\* Percent change for 2006, relative to 2003; NA indicates not applicable

## Table 15

Federal Expenditures for Research and Development Texas Public Universities										
	FY 2003	}	FY 200	4	FY 2005		FY 200	6		
Institution	Federal R&D Dollars	Fed/ State Ratio	Federal R&D Dollars	Fed/ State Ratio	Federal R&D Dollars	Fed/ State Ratio	Federal R&D Dollars	Fed/ State Ratio		
Midwestern State	\$20,865	0.45	\$77,388	343.95	\$46,493	NA	\$0	NA		
Stephen F. Austin State	\$1,208,382	14.51	\$1,025,461	6.47	\$1,076,097	3.52	\$3,739,260	2.78		
Texas A&M University System										
Prairie View A&M	\$8,106,963	3.53	\$8,138,054	3.56	\$8,670,785	4.56	\$9,067,524	5.26		
Tarleton State	\$5,856,670	2.72	\$5,439,350	1.96	\$6,248,440	1.83	\$5,487,270	1.54		
Texas A&M and Services	\$178,016,320	1.48	\$174,570,204	1.53	\$212,918,255	1.76	\$200,756,607	1.56		
Texas A&M-Commerce	\$198,275	1.17	\$355,709	3.08	\$424,070	0.80	\$303,856	0.55		
Texas A&M-Corpus Christi	\$5,667,854	1.27	\$6,233,432	1.53	\$5,059,684	1.38	\$7,970,993	2.63		
Texas A&M at Galveston	\$3,128,730	2.82	\$2,757,465	4.47	\$3,000,732	2.77	\$2,974,076	2.99		
Texas A&M International	\$486,102	46.53	\$119,762	7.05	\$190,209	7.15	\$193,353	10.62		
Texas A&M-Kingsville	\$2,766,449	0.62	\$3,856,738	0.96	\$5,028,940	1.34	\$4,624,586	2.39		
Texas A&M-Texarkana	\$113,290	NA	\$188,653	NA	\$199,617	NA	\$56,690	NA		
West Texas A&M	\$3,190,176	1.29	\$2,580,645	0.97	\$1,968,369	0.94	\$2,693,769	1.15		
Texas Southern	\$3,247,658	6.63	\$3,969,899	11.20	\$4,650,459	18.20	\$4,797,144	12.22		
Texas State University System										
Angelo State	\$131,977	0.25	\$155,851	0.33	\$127,653	0.26	\$109,084	0.19		
Lamar	\$1,998,033	1.26	\$1,504,062	1.02	\$1,259,293	0.65	\$1,785,278	1.27		
Sam Houston State	\$1,397,106	4.26	\$2,175,912	7.27	\$1,155,080	2.65	\$1,118,465	1.50		
Sul Ross State	\$95,580	0.19	\$261,417	0.63	\$1,506,617	3.38	\$1,509,828	3.19		
Sul Ross - Rio Grande	\$0	0.00	\$0	0.00	\$0	NA	\$0	0.00		
Texas State - San Marcos	\$3,975,213	1.10	\$3,536,053	1.29	\$3,045,059	1.44	\$1,930,534	0.62		
Texas Tech	\$23,285,324	1.01	\$23,393,040	1.55	\$22,804,929	1.44	\$23,321,205	1.36		
Texas Woman's	\$1,493,677	1.20	\$1,238,556	1.81	\$940,048	1.30	\$637,390	1.18		
University of Texas System										
UT at Arlington	\$7,993,576	0.64	\$11,093,256	1.40	\$17,833,042	1.44	\$19,095,309	1.66		
UT at Austin	\$240,537,689	4.75	\$249,014,154	5.69	\$269,612,823	5.83	\$294,832,202	5.71		
UT at Brownsville	\$1,011,353	NA	\$2,889,894	NA	\$4,897,516	NA	\$5,131,456	22.54		
UT at Dallas	\$14,432,841	1.37	\$15,733,571	1.73	\$19,933,291	1.19	\$19,953,502	1.37		
UT at El Paso	\$17,022,000	2.17	\$22,232,318	3.05	\$23,961,812	2.72	\$26,821,331	2.72		
UT-Pan American	\$1,895,223	1.73	\$2,666,191	2.06	\$3,770,457	2.69	\$4,237,445	2.08		
UT of the Permian Basin	\$166,777	0.25	\$1,215,420	2.63	\$360,016	0.61	\$348,266	0.50		
UT at San Antonio	\$10,049,314	3.29	\$11,705,185	3.74	\$16,174,944	3.22	\$21,463,037	3.46		
UT at Tyler	\$174,362	1.23	\$585,874	4.71	\$143,425	1.23	\$438,123	2.21		
University of Houston System										
Univ. of Houston	\$34,242,554	1.10	\$31,682,165	1.24	\$41,484,043	1.81	\$40,439,387	2.12		
Univ. of Houston-Clear Lake	\$696,239	1.32	\$396,016	0.73	\$503,975	0.95	\$315,272	0.46		
Univ. of Houston-Downtown	\$378,339	1.84	\$490,584	3.15	\$353,756	1.91	\$329,461	2.67		
Univ. of Houston-Victoria	\$0	NA	\$0	NA	\$0	NA	\$0	NA		
University of North Texas Totals	\$8,328,900 <b>\$581,313,811</b>	2.33 <b>2.00</b>	\$6,927,327 <b>\$598,209,606</b>	3.72 <b>2.36</b>	\$7,881,131 <b>\$687,231,060</b>	3.22	\$9,030,177 <b>\$715,511,880</b>	6.92 <b>2.50</b>		

NA indicates not applicable (no state research and development funds expended).

# Table 16

Expenditures for Research and Development Texas Public Health-Related Institutions											
Institution FY 2003 FY 2004 FY 2005 FY 2006											
Texas A&M HSC	\$50,435,247	\$58,485,824	\$70,704,945	\$72,326,559	43.40%						
Texas Tech Univ HSC	\$19,751,348	\$19,827,013	\$18,189,481	\$21,665,096	9.69%						
Univ North Texas HSC	\$14,901,791	\$18,519,957	\$22,325,471	\$23,867,554	60.17%						
UT M.D. Anderson Cancer	\$282,260,250	\$313,916,355	\$341,978,679	\$409,679,711	45.14%						
UTMB at Galveston	\$129,860,903	\$132,768,911	\$149,957,462	\$155,036,202	19.39%						
UTHSC at Houston	\$152,117,064	\$150,222,206	\$156,519,695	\$175,153,808	15.14%						
UT Health Center at Tyler	\$9,217,039	\$10,240,390	\$11,420,260	\$12,598,871	36.69%						
UTHSC at San Antonio	\$119,279,555	\$124,912,722	\$134,058,535	\$139,778,732	17.19%						
UT Southwestern Medical Center	\$277,956,511	\$314,403,028	\$320,801,884	\$333,256,162	19.90%						
Totals	\$1,055,779,708	\$1,143,296,406	\$1,225,956,412	\$1,343,362,695	27.24%						

NA indicates not applicable

\* Percent change for 2006, relative to 2003

# Table 17

Federal Expenditures for Research and Development Texas Public Health-Related Institutions											
	FY 2003	}	FY 2004	ļ	FY 2005	; ;	FY 200	6			
Institution	Federal R&D Dollars	Fed/ State Ratio	Dollars	Fed/ State Ratio	Federal R&D Dollars	Fed/ State Ratio	Dollars	Fed/ State Ratio			
Texas A&M HSC	\$26,729,107	2.32	\$30,283,043	2.87	\$32,949,216	2.98	\$35,213,635	2.47			
Texas Tech Univ HSC	\$8,674,208	2.36	\$7,603,557	1.61	\$6,278,949	0.86	\$9,712,580	1.35			
Univ North Texas HSC	\$9,454,472	15.11	\$13,258,816	21.82	\$17,036,630	73.66	\$19,183,193	194.75			
UT M.D. Anderson Cancer	\$122,868,912	1.57	\$150,528,694	1.67	\$160,953,856	1.61	\$182,028,411	1.50			
UTMB at Galveston	\$93,039,583	6.75	\$102,490,775	9.33	\$117,235,448	10.03	\$120,407,805	10.55			
UTHSC at Houston	\$111,170,193	9.37	\$110,438,174	7.95	\$116,397,631	8.09	\$122,870,079	4.74			
UT Health Center at Tyler	\$3,493,251	1.45	\$4,659,021	2.11	\$4,956,399	1.91	\$6,512,656	2.63			
UTHSC at San Antonio	\$86,854,337	14.72	\$89,661,741	18.21	\$95,125,850	19.80	\$95,110,395	12.36			
UT Southwestern Medical Center <b>Totals</b>	\$177,133,099 <b>\$639,417,162</b>	11.07 <b>4.43</b>	\$200,887,545 <b>\$709,811,366</b>	8.62 <b>4.41</b>	\$202,057,099 <b>\$752,991,078</b>	8.29 <b>4.28</b>	\$196,622,021 <b>\$787,660,775</b>	5.79 <b>3.51</b>			

NA indicates not applicable

Table '	18
---------	----

Federal Expenditures for Research and Development by Field Texas Public Universities and Health-Related Institutions											
Field	FY 2001	FY 2005	FY 2006	One-Year	Five-Year						
Field	FT 2001	FT 2005	FT 2000	Change	Change						
Agricultural Sciences	\$22,801,462	\$34,666,618	\$38,748,973	11.78%	69.94%						
Biological and Other Life Sciences	\$216,534,637	\$344,345,124	\$337,898,248	-1.87%	56.05%						
Computer Science	\$23,355,906	\$37,229,798	\$40,042,831	7.56%	71.45%						
Engineering	\$136,704,012	\$178,660,892	\$200,533,686	12.24%	46.69%						
Environmental Sciences	\$89,098,895	\$98,199,320	\$78,858,559	-19.70%	-11.49%						
Mathematical Sciences	\$20,341,750	\$28,647,807	\$31,786,518	10.96%	56.26%						
Medical Sciences	\$335,902,604	\$508,455,866	\$554,647,805	9.08%	65.12%						
Physical Sciences	\$71,679,380	\$102,157,599	\$100,628,421	-1.50%	40.39%						
Psychology	\$9,003,214	\$26,990,072	\$29,111,737	7.86%	223.35%						
Social Sciences	\$15,466,920	\$20,745,690	\$22,699,879	9.42%	46.76%						
Other Sciences	\$5,614,753	\$9,201,854	\$10,726,742	16.57%	91.05%						
Arts and Humanities	\$1,276,581	\$1,162,388	\$315,619	-72.85%	-75.28%						
Business Administration	\$2,223,926	\$1,736,571	\$1,720,738	-0.91%	-22.63%						
Education	\$25,176,460	\$37,087,252	\$43,895,921	18.36%	74.35%						
Law and Public Administration	\$2,327,220	\$1,936,173	\$2,706,174	39.77%	16.28%						
Other Non-Science Activities	\$3,365,459	\$8,999,114	\$8,850,804	-1.65%	162.99%						
Totals	\$980,873,179	\$1,440,222,138	\$1,503,172,655	4.37%	53.25%						

In 2001, the 77th Legislature passed the Centers for Technology Development and Transfer Act (Texas Education Code, Section 153.008), which specifies reporting requirements for intellectual property income and expenses. Intellectual property income is now reported biennially in a new report, *Technology Development and Transfer*.

# NATIONAL COMPARISONS

This section of the report is based on data provided by the National Science Foundation. It is not entirely consistent with data provided in earlier sections of the report because it is based on an earlier year and because reporting requirements are somewhat different. (Appendix B)

The National Science Foundation makes three reports available, and each provides somewhat different information:

- Federal Obligations for Science and Engineering shows federal obligations for grants and contracts awarded to higher education science and engineering programs by federal agencies during the fiscal year. Funds obligated in any given year may be expended over a number of years, so obligations will be somewhat different from expenditures. This report includes support for a number of programs that are not necessarily research and development programs, such as science education programs and assistantship support for engineering students. The amount of support is reported by the agencies.
- Federal Obligations for Research and Development in Science and Engineering includes only federal funds obligated during the year to support, directly or indirectly, basic and applied research and development in science and engineering disciplines at higher education institutions. The amount of support is again reported by the agencies. Data from this report measures progress toward the research goal for Texas' higher education plan, *Closing the Gaps by 2015*, which was revised in 2005.
- Federally Financed Research and Development Expenditures summarizes federal funds expenditures by higher education institutions to support research and development in any given year. This report is based on data reported by institutions and summarized by the National Science Foundation.

Some of the highlights of the 2004 survey of federal research and development expenditures include the following:

- The top five states in federal research and development expenditures were: California – \$3.78 billion New York – \$2.23 billion Maryland – \$1.71 billion Texas – \$1.65 billion Pennsylvania – \$1.59 billion
- Texas ranked first in state- and local government-funded research and development expenditures.
- o Texas ranked third in total research and development expenditures.
- Texas ranked fourth in research and development expenditures from institutional sources (behind California, New York and Illinois), second in research and development expenditures from industrial sources (behind California), and second in research and development expenditures from all other sources (behind California).
- In Texas, life sciences accounted for 68 percent of the research and development expenditures, followed by engineering (13 percent) and physical sciences (6 percent).
   Among states, Texas is ranked third in life sciences and fifth in physical sciences (Table 19).

Texas was last ranked among the top five states in engineering in FY 2000 and in environmental sciences in FY 2003.

	Table 19												
	Top Five States in Federal R&D Expenditures												
	Selected Science and Engineering Fields, FY 2004												
Rank	Life	\$	Enginooring	¢	Physical	\$	Environmental	¢					
Mank	Sciences	Ψ	Lingineening	Engineering \$		Ψ	Sciences	Ψ					
1	California	2.2B	Maryland	468M	California	491M	California	207M					
2	New York	1.6B	California	464M	Massachusetts	223M	Colorado	141M					
3	Texas	1.1B	Pennsylvania	258M	Maryland	198M	Massachusetts	136M					
4								104M					
5	Massachusetts	842M	New York	207M	Texas	123M	Maryland	85M					

Note: M refers to million; B refers to billion.

Source: National Science Foundation, WebCASPAR Database System, 03/23/2007

Table 20 shows the ranking of all states in federal obligations for science and engineering, federal obligations for research and development in science and engineering, and federally financed research and development expenditures for 2004. Texas ranks fifth in federal obligations for science and engineering, which includes science education, and also ranks fifth in federal obligations for research and development in science and engineering, which excludes science education. Texas ranks fourth in research and development expenditures from federal sources. Patterns in federal research and development support over time for the top six states are shown in Figures 9 and 10. California and New York are the uncontested leaders in federal research support to the states.

State Rank in Federal Obligations and Federally Financed R&D, FY 2004 (Thousands of Dollars)											
	Federal Obligations for Science and Engineering to Colleges and Universities			ons for R&D Engineering Universities	Federally Financed R&D Expenditures at Colleges and Universities						
State	FY 2004	Rank	FY 2004	Rank	FY 2004	Rank					
California	\$3,772,923	1	\$3,458,540	1	\$3,784,422	1					
New York	\$2,223,117	2	\$1,948,714	2	\$2,230,932	2					
Maryland	\$1,662,914	3	\$1,382,909	4	\$1,710,143	3					
Pennsylvania	\$1,634,436	4	\$1,489,570	3	\$1,594,968	5					
Texas	\$1,558,383	5	\$1,342,911	5	\$1,645,063	4					
Massachusetts	\$1,496,390	6	\$1,342,045	6	\$1,581,104	6					
North Carolina	\$1,076,923	7	\$948,086	7	\$933,291	8					
Illinois	\$1,009,067	8	\$893,052	8	\$1,066,317	7					
Michigan	\$819,046	9	\$729,710	9	\$820,716	10					
Ohio	\$758,414	10	\$672,900	10	\$848,898	9					
Washington	\$736,150	11	\$652,589	11	\$705,963	12					
Colorado	\$669,043	12	\$569,159	12	\$621,459	14					

Table 20

(table continued on next page)

Table 20 - (	continued
--------------	-----------

Table 20 - continued											
State R	State Rank in Federal Obligations and Federally Financed R&D, FY 2004 (Thousands of Dollars)										
	Federal Oblig	•	Federal Obligatio		Federally Fina	anced R&D					
	Science and I		Science and E		Expenditures at College						
	to Colleges and	Universities	to Colleges and	Universities	and Univ	ersities					
State	FY 2004	Rank	FY 2004	Rank	FY 2004	Rank					
Florida	\$638,557	13	\$535,443	14	\$746,889	11					
Wisconsin	\$613,194	14	\$482,815	16	\$562,866	15					
Missouri	\$599,185	15	\$539,541	13	\$543,237	16					
Georgia	\$596,611	16	\$508,349	15	\$700,306	13					
Virginia	\$519,435	17	\$441,042	18	\$527,199	17					
Connecticut	\$499,549	18	\$460,469	17	\$467,555	18					
Tennessee	\$491,315	19	\$411,875	19	\$436,220	19					
Alabama	\$410,187	20	\$326,075	22	\$417,000	21					
Minnesota	\$378,680	21	\$335,851	20	\$312,782	25					
Indiana	\$375,738	22	\$335,397	21	\$365,336	24					
New Jersey	\$347,567	23	\$301,721	23	\$420,323	20					
Arizona	\$345,254	24	\$290,624	24	\$376,657	22					
Oregon	\$332,207	25	\$286,895	25	\$370,921	23					
lowa	\$316,638	26	\$274,304	26	\$306,237	26					
Louisiana	\$268,180	27	\$210,720	28	\$235,304	30					
Utah	\$260,433	28	\$240,067	27	\$286,193	27					
Kentucky	\$228,656	29	\$181,254	30	\$195,032	33					
District of Columbia		30	\$187,416	29	\$239,752	29					
South Carolina	\$208,975	31	\$165,703	33	\$245,411	28					
New Mexico	\$204,772	32	\$169,542	31	\$204,358	32					
Mississippi	\$201,382	33	\$162,127	34	\$211,346	31					
Hawaii	\$198,720	34	\$169,376	32	\$191,252	34					
New Hampshire	\$165,170	35	\$141,066	35	\$191,026	35					
Kansas	\$157,267	36	\$132,237	36	\$170,548	36					
Nebraska	\$142,578	37	\$116,334	37	\$129,578	39					
Oklahoma	\$136,045	38	\$105,192	39	\$140,434	37					
Rhode Island	\$127,220	39	\$112,695	38	\$133,282	38					
Arkansas	\$101,188	40	\$83,045	40	\$94,040	42					
Vermont	\$90,913	41	\$81,709	41	\$80,242	46					
Alaska	\$87,292	42	\$77,972	42	\$82,681	43					
Montana	\$85,592	43	\$68,158	44	\$97,411	41					
Nevada	\$79,774	44	\$74,107	43	\$105,035	40					
North Dakota	\$74,224	45	\$60,136	45	\$81,724	40					
West Virginia	\$69,736	46	\$53,995	47	\$79,482	47					
Delaware	\$69,555	40	\$59,642	46	\$80,925	45					
Idaho	\$51,465	48	\$38,222	48	\$64,623	43					
South Dakota	\$46,529	48 49	\$33,206	48 49	\$35,869	40 50					
Maine	\$35,169	49 50	\$25,604	49 50	\$38,918	50 49					
Wyoming	\$35,169 \$27,048	50 51	\$23,804 \$24,481	50 51	\$30,910 \$23,186	49 51					
vvyonning	<b>⊅∠</b> ≀,∪48	51	⊅ <b>∠4,48</b> 1	51	¢∠3,180	51					

 ${\tt SOURCE: National Science Foundation, WebCASPAR Database System, 03/23/2007}$ 



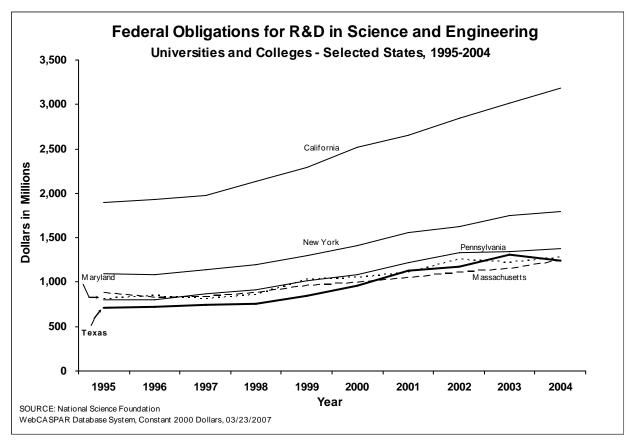


Figure 10

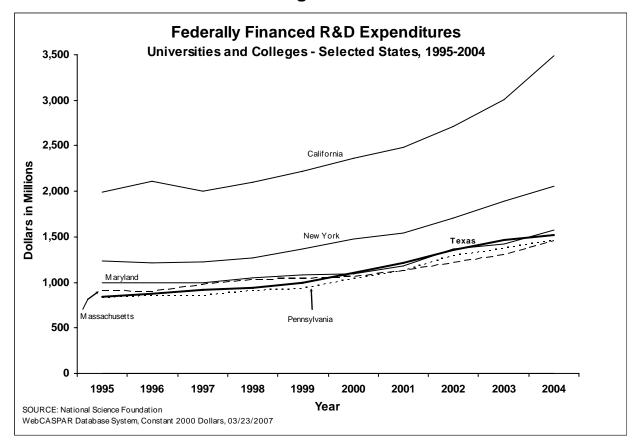


Table 21 shows federal obligations and federally financed research and development expenditures for Texas higher education institutions for FY 2004. The table includes public and independent institutions. The top five institutions account for 57, 62, and 65 percent of the total federal support in Federal Obligations for Science and Engineering, Federal Obligations for R&D in Science and Engineering, and Federally Financed R&D Expenditures categories, respectively.

Federal Obligations and Federally Financed R&D by Texas Institutions, FY 2004 (Thousands of Dollars)								
	Federal Obligations	Federal Obligations	Fodorolly Financed					
Institution	for Science and	for R&D in Science	Federally Financed					
	Engineering	and Engineering	R&D Expenditures					
Abilene Christian	\$371	\$165	\$135					
Angelo State	\$18							
Baylor- Coll. of Medicine	\$264,888	\$252,565	\$312,669					
Baylor Univ.	\$3,314	\$2,305	\$1,372					
Brazosport Coll.	\$410							
Coll. of the Mainland	\$1,000							
Collin County Community Coll.	\$640							
Del Mar Coll.	\$733							
Eastfield Coll.	\$396							
El Paso Community Coll.	\$675	\$559						
Frank Phillips Coll.	\$1,000							
Grayson County Coll.	\$1,000							
Houston Community Coll.	\$685							
Huston-Tillotson Coll.	\$50							
Jarvis Christian Coll.	\$599	\$92	\$232					
Lamar	\$1,098	\$1,098	\$1,494					
Le Tourneau Univ.	\$98	\$98						
Lee Coll.	\$504							
Midland Coll.	\$1,275							
Midwestern State	\$23							
North Harris Montgomery Cmty. Coll. District								
Our Lady of the Lake	\$1,592	\$596						
Prarie View A&M	\$12,266	\$5,276	\$7,965					
Rice Univ.	\$50,740	\$39,389	\$51,157					
Richland Coll.	\$396							
Sam Houston State	\$848	\$385	\$866					
San Jacinto Coll.	\$60	\$60						
San Jacinto Coll. District System	\$1,194							
South Plains Coll.	\$499							
Southern Methodist	\$4,225	\$4,064	\$6,752					
Southwestern Univ.	\$406	φ <del>-</del> ,00+ 						
St. Mary's Univ.	\$609	\$364	\$414					
Stephen F. Austin State	\$651	\$551	\$740					
Sul Ross State	\$1,967	\$1,675	\$261					
Tarleton State	\$794	\$447	\$5,208					
Tarleton State Univ. Sys. CtrCentral TX	\$16	\$16	φ0,200					
Shading indicates the five highest in each category.	φ10	φισ						

### Table 21

# Table 21 - continued

Federal Obligations and Federally Financed R&D by Texas Institutions, FY 2004 (Thousands of Dollars)									
Institution	Federal Obligations for Science and Engineering	Federal Obligations for R&D in Science and Engineering	Federally Financed R&D Expenditures						
Temple Coll.	\$223								
Texas A&M and Services	\$89,529	\$58,083	\$173,705						
Texas A&M HSC	\$33,776	\$27,687	\$30,283						
Texas A&M System Office	\$34,557	\$33,150							
Texas A&M-Commerce	\$213		\$54						
Texas A&M-Corpus Christi	\$1,403	\$756	\$5,685						
Texas A&M-Kingsville	\$2,896	\$1,936	\$3,832						
Texas A&M-Texarkana	\$390								
Texas Christian	\$3,499	\$3,389	\$2,961						
Texas Southern	\$5,535	\$4,537	\$3,749						
Texas State Technical Coll.	\$621								
Texas State - San Marcos	\$2,118	\$710	\$3,536						
Texas Tech (includes HSC)	\$25,493	\$20,315	\$30,785						
Texas Wesleyan Univ.	\$121								
Texas Woman's	\$444		\$1,175						
Trinity Univ.	\$264	\$264	\$805						
Tyler Junior Coll.	\$226								
Univ. North Tx HSC			\$13,259						
Univ. of Houston	\$28,050	\$25,175	\$34,468						
Univ. of Houston System Administration	\$640	\$640							
Univ. of Houston-Clear Lake	\$234	\$234	\$238						
Univ. of Houston-Downtown	\$1,909	\$1,909	\$449						
Univ. of the Incarnate Word	\$1,010								
University of North Texas	\$19,048	\$17,192	\$5,499						
UT at Arlington	\$13,090	\$8,567	\$10,498						
UT at Austin	\$187,523	\$149,199	\$235,281						
UT at Dallas	\$13,391	\$12,957	\$15,733						
UT at El Paso	\$27,583	\$12,382	\$16,900						
UT at San Antonio	\$16,938	\$8,626	\$11,644						
UT at Tyler	\$5,272	\$3,995							
UT M.D. Anderson Cancer	\$160,091	\$157,773	\$150,529						
UT Southwestern Medical Center	\$177,520	\$167,698	\$200,888						
UT System Office	\$41,967	\$36,023							
UTHSC at Houston	\$101,427	\$88,852	\$106,737						
UTHSC at San Antonio	\$93,165	\$86,697	\$89,662						
UTMB at Galveston	\$102,882	\$99,100	\$102,491						
UT-Pan American	\$6,384	\$3,596	\$2,578						
UT of the Permian Basin	\$518								
Weatherford Coll.	\$1,025								
West Texas A&M	\$1,797	\$1,764	\$2,205						
Wharton County Junior Coll.	\$496								
Wiley Coll.			\$169						
Texas Total	\$1,558,383	\$1,342,911	\$1,645,063						

 ${\tt SOURCE: National Science Foundation, WebCASPAR Database System, 02/23/2007}$ 

Shading indicates the five highest in each category.

Г

Figure 11 shows federal obligations to Texas higher education institutions for research and development in science and engineering by federal agency. The National Institutes of Health have a long history of providing most of the federal research support to Texas higher education institutions. The budget of this federal agency doubled from 1999 to 2003, providing more research funding for higher education institutions across the country.

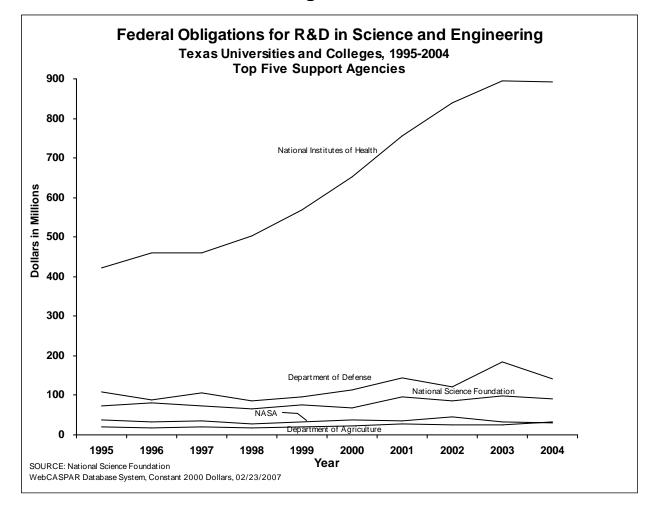


Figure 11

Table 22 shows obligations from federal agencies providing the most support to Texas higher education institutions. The National Institutes of Health provide most of the federal support at health-related institutions. The National Institutes of Health, the Department of Defense, and the National Science Foundation provide most of the federal support for The University of Texas at Austin. The Department of Agriculture and the National Science Foundation provide most of the support for Texas A&M University. The National Science Foundation, the Department of Defense, and the National Institutes of Health provide most of the federal support for Rice University. The University of Houston receives most of its federal support from the National Institutes of Health and the National Science Foundation.

### Table 22

Texas Universities and Colleges											
with Federal Science and Engineering R&D Obligations of More Than \$10 Million											
by Support Agency, FY 2004 (Thousands of Dollars)											
Institution	National Institutes of Health	Dept. of Defense	National Science Foundation	Dept. of Agriculture	NASA	Dept. of Energy	All Other Federal Agencies	Federal			
Baylor-Coll. of Medicine	\$235,739	\$10,013		\$5,839	\$271		\$703	\$252,565			
UT Southwestern Med Center	\$164,422	\$2,501	\$346		\$19		\$410	\$167,698			
UT M.D. Anderson Cancer	\$142,957	\$13,867			\$98		\$851	\$157,773			
UT at Austin	\$46,832	\$41,240	\$35,282	\$268	\$6,817	\$15,141	\$3,619	\$149,199			
UTMB at Galveston	\$93,281	\$3,119	\$607		\$901	\$368	\$824	\$99,100			
UTHSC at Houston	\$77,116	\$9,577	\$336	\$110		\$1,060	\$653	\$88,852			
UTHSC at San Antonio	\$80,724	\$1,409	\$412		\$1,641		\$2,511	\$86,697			
Texas A&M		\$4,365	\$18,567	\$19,846	\$5,137	\$3,324	\$6,844	\$58,083			
Rice	\$7,042	\$8,826	\$16,904		\$2,476	\$2,100	\$2,041	\$39,389			
UT System Office		\$33,425			\$2,404		\$194	\$36,023			
Texas A&M System Office	\$26,564	\$2,072			\$1,201	\$1,450	\$1,863	\$33,150			
Texas A&M HSC	\$27,550						\$137	\$27,687			
Univ. of Houston	\$14,611	\$19	\$7,821		\$1,146	\$1,515	\$63	\$25,175			
Texas Tech (includes HSC)	\$6,972	\$3,125	\$2,769	\$3,192	\$2,278	\$1,296	\$683	\$20,315			
University of North Texas	\$11,260	\$3,022	\$2,398			\$462	\$50	\$17,192			
UT at Dallas	\$4,371	\$2,813	\$3,958		\$1,279	\$536		\$12,957			
UT at El Paso	\$4,129	\$1,905	\$2,795		\$2,993	\$20	\$540	\$12,382			
All other Institutions	\$23,584	\$11,349	\$7,815	\$7,534	\$3,366	\$2,523	\$2,503	\$58,674			
Totals	\$967,154	\$152,647	\$100,010	\$36,789	\$32,027	\$29,795	\$24,489	\$1,342,911			

SOURCE: National Science Foundation, WebCASPAR Database System, 02/23/2007

Figure 12 shows federally financed research and development expenditures at Texas public and independent higher education institutions by scientific discipline. Most of the expenditures are made in medical and biological sciences.

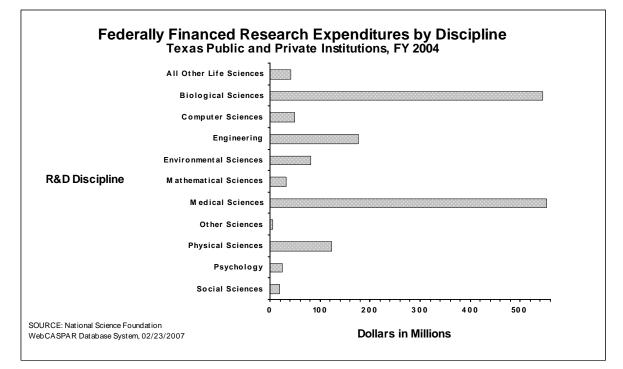


Figure 12

# **APPENDIX A – RESEARCH EXPENDITURES SURVEYS**

### THECB - Survey of Research Expenses, FY 2006 Public Universities and Health-Related Institutions About the On-Line Form

### The survey should be completed by using the on-line form by December 8, 2006

The on-line form will be used to submit your institution's FY 2006 research expense data. The login page for the form has an instructions page and links to previous expenditures reports. Blank Lotus and Excel worksheets can be downloaded here, but the information still must be entered into the on-line form.

The on-line form consists of five parts, easily navigated with the buttons on the bottom of each web page. The whole form is saved when clicking on the "Total" buttons, going from page to page or clicking the "Save and Logoff" buttons. Using the "Reload Last Save" button will return information changed on a particular page before any other buttons are clicked on. Clicking underlined row or column labels will open a viewable definition for that item, and full instructions and definitions are accessible from the bottom of any page. Use whole dollar amounts, as the system will truncate decimals. The system will ignore any characters (dollar signs, commas, etc.) typed into entry blocks in parts 2-5. Click on any "Total" button to calculate column and row totals which are clearly marked in yellow.

The FICE code for your institution will be used to log in to the system, and please safeguard the provided password and authorization code. The password may be issued to individuals for completion of the form. When the form is ready for final submission, the final approval authority (usually the highest research executive at the institution) clicks the "Submit to THECB" button in part 5 and enters name, title and the authorization code.

Using the print button before final authorization will produce a draft printout of all forms. After final authorization, your data cannot be accessed or altered, but a printout of the final version can be produced. If you have questions or need assistance, contact information is located at the bottom of each web page or you may call Dale Cherry or Linda Domelsmith at 512-427-6150.

A Stores of the	Texas Highe	r Education Coordina	tting Board
Stence Recess			Enter Keyword(s) GO
stence Reses	THECB Survey of Researc (Sep. 1, 2003 - Aug. 31, 2006)	h Expenditures, FY 2006	Advanced Search >>>
Home	Universities and Health-R	elated Institutions	
Closing the Gaps			QUICK LINKS
Report Center Interactive Tools Rules/Regulations The Board	On-Line Electronic Submission System The survey should be completed by using (independent institutio	the on-line form by December 8, 2006	1. Texas Workforce Education 2. Transcript, Accreditation and College Name Use
The Commissioner	To Access the On-line form, login below	Instructions and Definitions	3, <u>Commissioner's</u> <u>Recommendations</u>
Staff Directory Grant Information	Institution: ISA Texas University	<u>About the On-line Form</u>	<u>to the Board</u> 4, <u>Customer Service</u> <u>Survey</u>
Want to go to college?	Password:	Downloadable Worksheets	RECENT REPORTS
Go Get It.	Login Clear	● <u>Excel</u> ● <u>Lotus</u>	1, Institutional Deferred Maintenance to 2, Press Release -
Data and Statistics			Students Should



THECB Survey of Research Expenditures, FY 2006 (Sep. 1, 2005 - Aug. 31, 2006) Part 1 of 5 - Contact Information

First Name: Last Name:	
Institution: ISA Texas University Address:	
College Town, TX 78727	
Phone Number: E-mail:	
Save and Logoff Save Go to Part 2 Print PDF Print	Reload Last Save



# THECB Survey of Research Expenditures, FY 2006 (Sep. 1, 2005 - Aug. 31, 2006) Part 2 of 5 - Expenditures for Conduct of R&D by Field ISA Texas University

	Federal	State		Institution	Private		Total
		Appropriated	Contract/Grants	Controlled	Profit	Non-Profit	Total
1. Agricultural Sciences	0	0	0	0	0	0	\$
2. Biological and Other Life Sciences	0	0	0	0	0	0	\$1
3. Computer Science	0	0	0	0	0	0	\$
4. Engineering	0	0	0	0	0	0	\$1
5. Environmental Sciences	0	0	0	0	0	0	\$1
6. Mathematical Sciences	0	0	0	0	0	0	\$1
7. Medical Sciences	0	0	0	0	0	0	\$
8. Physical Sciences	0	0	0	0	0	0	\$
9. Psychology	0	0	0	0	0	0	\$1
10. Social Sciences	0	0	0	0	0	0	\$
11. Other Sciences not classified above	0	0	0	0	0	0	\$1
12. Arts and Humanities	0	0	0	0	0	0	\$
13. Business Administration	0	0	0	0	0	0	\$1
14. Education	0	0	0	0	0	0	\$
15. Law and Public Administration	0	0	0	0	0	0	\$
16. Other Non-Science Activities not classified above	0	0	0	0	0	0	\$
Total Expenditures for Conduct of R&D Total		\$0	\$0 \$1	\$	0 \$	0 \$0	D \$

### Sources of Funds(use whole dollar amounts)



#### THECB Survey of Research Expenditures, FY 2006 (Sep. 1, 2005 - Aug. 31, 2006) Part 3 of 5 - Details for Total Expenditures for Conduct of R&D ISA Texas University

Sources of Funds(use whole dollar amounts)

1. Expenses for R&D, as defined in this report, that are reported as the functional total expenses for research on the Statement of Revenues, Expenses and Changes in Net Assets, Annual Financial Report	0
2. Indirect costs associated with figure reported in line 1	0
3. Capital outlay for research equipment (do not include R&D plant expenses or construction)	0
4. Expenditures for Conduct of R&D made by institution's research foundation or 501(C)3 corporation on behalf of the institution and not reported on institution's Annual Financial Report, including indirect costs not reported in line 2	0
5. Pass-throughs from Texas Engineering Experiment Station for conduct of R&D not reported in Line 1	0
Sum of 1 through 5	\$0
Sum of 1 through 5 MUST equal "Total Expenditures for Conduct of R&D" from Part 2	\$0
Save and Logoff Save Back to Part 2 Go to Part 4 Print PDF Print Relo	ad Last Save



THECB Survey of Research Expenditures, FY 2006 (Sep. 1, 2005 - Aug. 31, 2006) Part 4 of 5 - Total Expenditures for Research-Related Activities ISA Texas University

Sources of Funds(use whole dollar amounts)

	<u>Federal</u>	State		Institution	Private		Total
		Appropriated	Contract/Grants	<u>Controlled</u>	Profit	Non-Profit	Total
<ol> <li>Expenses for Activities Reported as Research on the Statement of Revenues, Expenses and Changes in Net Assets, Annual Financial Report, but not meeting the narrow definition of R&amp;D used in this report.</li> </ol>	0	0	0	0	0	0	\$0
2. Other Research-related equipment expenditures (noncurrent fund expenses, etc do not include R&D plant expenses or construction)	0	0	0	0	0	0	\$0
3. Total Expenditures for Conduct of R&D (from Part 2)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenditures for Research-Related Activities (Sum of 1-3) Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Save and Logoff Save	Back to Part 3	Go to Part	5 Print PDF	- Print		Reload Last Sa	ave

# Part 5 for Public Universities



# THECB Survey of Research Expenditures, FY 2006 (Sep. 1, 2005 - Aug. 31, 2006) Part 5 of 5 - <u>Expenditures for Conduct of R&D in Areas of Special Interest</u> (funds may be reported in more than one area) ISA Texas University

	Federal	<u>S</u>	<u>tate</u>	Institution	Private		TIL
		Appropriated	Contract/Grants	<u>Controlled</u>	Profit	Non-Profit	Total
1. Aerospace Technology	0	0	0	0	0	0	\$0
2. Biotechnology	0	0	0	0	0	0	\$0
3. Energy	0	0	0	0	0	0	\$0
4. Environmental Sciences	0	0	0	0	0	0	\$0
5. Food, Fiber, Agricultural Products	0	0	0	0	0	0	\$0
6. Manufacturing Technology	0	0	0	0	0	0	\$0
7. Materials Science	0	0	0	0	0	0	\$0
8. Microelectronics and Computer Technology	0	0	0	0	0	0	\$0
9. Water Resources	0	0	0	0	0	0	\$0
Total Expenditures for Conduct of R&D in Areas of Special Interest (Sum of categories above) Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0

# Part 5 for Public Health Institutions



THECB Survey of Research Expenditures, FY 2006 (Sep. 1, 2005 - Aug. 31, 2006) Part 5 of 5 - Expenditures for Conduct of R&D in Areas of Special Interest (funds may be reported in more than one area) **ISA Texas Health Institution** 

	<u>Federal</u>	State		Institution	Private		Total
		Appropriated	Contract/Grants	<u>Controlled</u>	Profit	Non-Profit	Totar
1. Aging	0	0	0	0	0	0	\$0
2.Cancer Research	0	0	0	0	0	0	\$0
3. Cardiovascular Research	0	0	0	0	0	0	\$0
4. Child Health and Human Development	0	0	0	0	0	0	\$0
5. Mental Health	0	0	0	0	0	0	\$0
6. Substance Abuse	0	0	0	0	0	0	\$0
Total Expenditures for Conduct of R&D in Areas of Special Interest (Sum of categories above) Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0

#### Sources of Funds(use whole dollar amounts)

### The survey should be completed by using the on-line form by December 8, 2006

### **About This Survey**

This is an annual survey conducted by the Texas Higher Education Coordinating Board. It is mandated by the Texas Legislature, and it is the basis for an annual report of research expenses at Texas institutions of higher education.

The report is widely used by institutions of higher education and other state agencies, and excerpts from the report are widely reported in the press. In addition, the data provides the basis for many far-reaching policy and management decisions. It is critical that the data be reported accurately and completely.

This report should be consistent with the Annual Financial Report (AFR) of the institution. Refer to <u>College and University Business Administration</u>, NACUBO.

The report includes only separately budgeted and accounted for expenses and does not include research done by faculty members as a regular part of their academic duties.

The data collection form and definitions are modeled after similar forms used by the National Science Foundation in an effort to provide comparability of data with national data and to reduce the data collection efforts of the institutions.

Blank Lotus 1-2-3 and Excel worksheets can be downloaded here, but the information is required to be entered into the on-line form.

### **General Concepts and Definitions**

### A. Research and Development (R&D) activities are defined as follows:

1. <u>Research</u> is systematic study directed toward fuller scientific knowledge or understanding of the subject studies.

2. <u>Development</u> is systematic use of knowledge or understanding gained from research, directed toward the production of useful materials, devices, systems, or methods including design and development of prototypes and processes.

Exclusions from research and development:

- Training of scientific manpower
- Mapping and surveys
- Routine product testing
- Quality Control
- Experimental production
- Collection of general purpose statistics (statistics not collected as part of a specific R&D project)

NOTE: Certain activities may or may not be classified as research and development depending upon circumstances. Examples of such activities are given below in section B, Reporting Guidelines for R&D versus Non-R&D Activities.

### B. Selected financial terms

Fiscal Year 2006 - The 12-month accounting period ending August 31, 2006.

<u>Expenditures</u> - All amounts of money paid out by your institution to support R&D activities. Include funds "passed through" to other institutions of higher education. Include earned indirect costs and fringe benefits. Do not include non-monetary awards.

<u>Federal Funds</u> - All Federal monies used in support of the R&D activities of your institution. These include reimbursements, contracts, grants, and any identifiable amounts spent from Federal programs including Federal monies passed through state agencies.

<u>State Sources</u> - Include all expenditures of funds appropriated by the State of Texas not included in institutionally controlled funds listed in paragraph 5 below. Included in this category are state appropriated "Special Items" and state contracts and grants such as ATP and ARP funds, interagency contracts, contracts with Texas local governments, etc.

<u>Institutionally Controlled</u> - Include expenditures of funds that are locally controlled. This would include PUF and AUF funds, other local funds, etc.

<u>Private</u> - Include expenditures of funds from both for-profit and not-for-profit corporations and individuals. Also, include in this category funds from agencies from other states.

### **Definitions for Specific Items**

(Numbering corresponds to line number for on-line data collection form)

Expenses for conduct of R&D - All expenses except those for R&D plant. (Part 2, Total of 1-16)

Capital outlay for research equipment

As a result of recent changes adopted by the Government Accounting Standards Board, annual financial reports will report expenses rather than expenditures. The major difference is that capital outlays for research equipment will be depreciated over the life of the equipment and will not be separately identified as research items in the annual financial reports. This line allows inclusion of expenditures for equipment that are not included in research expenses (Part 3, line 1). The research definition used for this report does not allow inclusion of expenses for R&D plant or construction (Part 3, Line 3)

Expenses for other research-related activities - Reported as research on the AFR but not meeting the narrower definitions of R&D required in this report. Externally-funded activities that cannot be classified as R&D using the definitions appearing in A, above, are included. Do not include projects funded with "development" funds unless they are related to research activities. (Part 4, Line 1)

#### Notes: Reporting Guidelines for R&D versus Non-R&D Activities:

<u>Economic studies</u> - To be classified as research, the activities under this heading should be systematic and intensive. They should not include program planning, implementation, and evaluation unless these activities are designed as a fairly rigorous research effort. For example, a study to determine the impact of proposed tax changes on State revenues, or on Statewide employment, consumption, or industrial output could be reported as economic research. But the collection of economic data on tax revenues, personal income, or industrial output would be reported as economic research only if collected as part of the research project.

<u>Evaluation</u> - Evaluation qualifies as research when it is part of a specific research undertaking. Evaluation conducted separately from a research project is considered research when it involves scientific method and hypothesis testing procedures with fairly rigorous standards. Evaluation activities that do not involve systematic design and testing should not be included.

<u>Demonstration</u> - Demonstration activities that are part of research or development (i.e., that are intended to prove or to test whether a technology or method does, in fact, work) should be included. Demonstration intended to make available information about new technologies or methods should not be included. For example, an educational demonstration on new teaching methods should be reported as an R&D activity if the demonstration is established as an experiment to produce new information, is accomplished within a definite time period, and is accompanied by a thorough evaluation. An educational demonstration to apply or exhibit new teaching methods, or a demonstration without a scheduled termination or a thorough evaluation, should not be reported as an R&D activity.

<u>Collection of statistical data</u> - The collection of statistics is an R&D activity only if conducted as part of a specific research or development program. For example, the regular collection and publication of statistics on the incidence of various diseases within a State by a State health department is general purpose data collection and not research or development. The data gathering is not part of a research program and is designed for use by a range of persons, such as practicing physicians, public health officials, and school officials. If the data on incidence of diseases are gathered as part of a project on the origin and nature of particular diseases, however, or to establish generalizations on why certain individuals or groups contract certain diseases, this would be research.

<u>Satellite information</u> - Photographs and tapes purchased from Federal agencies (or others) sponsoring satellite operations are not considered research and development unless they are used primarily in support of a research or development program. Tapes and photographs that are stored in documentation centers or used primarily for the formulation of regulations are excluded from this survey.

<u>Technology transfer</u> - Technology transfer involves the adoption, and perhaps adaptation, of new techniques or products that have already been brought to a usable condition. The adoption and use of a technology is not research and development, but the adaptation of a technology to meet unique regional or local needs could involve R&D activities. For example, a new method of treating water to make it potable is developed in one State. If another State adopts the same treatment process, the adoption costs for facilities, equipment, personnel, etc., are not R&D expenditures. However, if further systematic, intensive study is required by the second State to modify the treatment process to adapt it to unique local conditions, the costs of modification and adaptation could be R&D expenditures.

<u>Agricultural sciences</u> deal with the production of food and fiber. They include work in plant sciences, animal sciences, aquaculture, agricultural economics, and other topics related to the agricultural enterprise. (Part 2, Line 1)

<u>Biological sciences</u> are those life sciences (apart from medical sciences and agricultural sciences described above) that deal with the origin, development, structure, function, and interaction of living things. Examples of biological sciences are as follows: anatomy; animal sciences; bacteriology; biochemistry; biogeography; biophysics; ecology; embryology; entomology; evolutionary biology; genetics; immunology; microbiology; molecular biology; nutrition and metabolism; parasitology; pharmacology; physical anthropology; physiology; plant sciences; radiobiology; systematics. (Part 2, Line 2)

<u>Computer science</u> is concerned with the application of mathematical methods to automated information systems, the development of computer technology, and advanced applications of computers. (Part 2, Line 3)

Engineering is concerned with studies directed toward developing engineering principles or toward making specific principles usable in engineering practice. Engineering fields include aeronautical, astronautical, chemical, civil, electrical, mechanical, metallurgy and materials, and engineering not elsewhere classified, such as agricultural, bioengineering, biomedical, industrial, nuclear, ocean and systems. (Part 2, Line 4)

<u>Environmental sciences (terrestrial and extraterrestrial) are concerned with the gross, non-biological properties (with one exception) of the areas of the solar system that directly or indirectly affect man's survival and welfare. They comprise the fields of atmospheric sciences, geological sciences, and oceanography. The one exception is that expenditures for studies pertaining to life in the sea or other bodies of water are to be reported as support of oceanography and not biology. (Part 2, Line 5)</u>

<u>Mathematical sciences</u> employ logical reasoning with the aid of symbols and are concerned with the development of methods of operation employing such symbols. (Part 2, Line 6)

<u>Medical sciences</u> are concerned with the causes, effects, prevention, or control of abnormal conditions in man or his environment as they relate to health. Included are the clinical medical sciences, which are concerned with the study of the origins, diagnosis, or treatment of a particular disease in living human subjects under controlled conditions, and other medical sciences. Examples of the medical sciences are as follows: internal medicine; neurology; ophthalmology; preventive medicine and public health; psychiatry; radiology; surgery; veterinary medicine; dentistry; physical medicine and rehabilitation; podiatry. (Part 2, Line 7)

<u>Physical sciences</u> are concerned with the understanding of the material universe and its phenomena. They comprise the fields of astronomy, chemistry; physics, and physical sciences not elsewhere classified. (Part 2, Line 8)

<u>Psychology</u> deals with behavior, mental processes, and individual and group characteristics and abilities. Examples of disciplines within psychology are as follows: experimental psychology; animal behavior; clinical psychology; comparative psychology; ethnology; social psychology; educational personnel, vocational psychology and testing; industrial and engineering psychology; development and personality. (Part 2, Line 9)

<u>Social sciences</u> are directed toward an understanding of the behavior of social institutions and groups and of individuals as members of a group. These include anthropology, economics, history, linguistics, political sciences, and sociology. (Part 2, Line 10)

<u>Other sciences</u> not elsewhere classified is a category to be used for multidisciplinary and interdisciplinary projects and cannot be classified within one of the broad fields of science listed above. (Part 2, Line 11)

<u>Arts and humanities</u> include topics such as art, music, history, languages, religion, and other aspects of man's culture and heritage. (Part 2, Line 12)

<u>Business administration</u> deals with the management and operation of business enterprises. It includes work in management, marketing, accounting, and related topics. (Part 2, Line 13)

<u>Education</u> includes research related to any aspect of education. This includes elementary, secondary, and higher education; educational policy; education administration; etc. (Part 2, Line 14)

Law and public administration includes research related to legal systems and to public policy at the federal, state, or local levels. (Part 2, Line 15)

<u>Other non-science activities</u> should include all non-science disciplines not appropriately categorized above. (Part 2, Line 16)

<u>Areas of Special Interest</u> - This section is intended to provide information on expenditures in areas of special interest to the public. The list is not all-inclusive. The totals in Part 5 will not normally be equal to the "Total Expenditures for Conduct of R&D" found in Part 2. Further, expenditures may overlap two or more categories (e.g., a given project may be reported both as materials science and microelectronics or as mental health and substance abuse). Institutions may need to use <u>ad hoc</u> estimators to come up with these numbers. (Part 5)

# **APPENDIX B – DIFFERENCES IN THECB AND NSF SURVEY**

For the most part, the THECB and NSF research expenditure surveys are similar, but differ in a few key areas that will cause differences:

1. The THECB survey collects information on non-science disciplines and uses them in reporting. In many cases, by institution, this will make the THECB figure higher than NSF's. NSF collects information on non-science disciplines, but in most of their reports keep science and non-science disciplines separated.

2. The NSF survey allows institutions a way of calculating their unreimbursed indirect costs. THECB's survey allows only tracked indirect costs as reported on the institution's annual financial report. Institutions using the NSF calculation will have a considerably higher total in the *Institution* source of funding (see <u>http://www.nsf.gov/statistics/profiles/</u> to compare individual institutions).

3. NSF may impute data for institutions who do not respond to the survey or fully complete their form.

# **APPENDIX C – INSTITUTIONAL CONTACTS**

The following list contains the institutional representatives who submitted the data for this report. They may be contacted directly for additional information regarding research activities on individual campuses.

Abilene Christian University Elizabeth Puthoff Research (512) 472-9522 x 103 elizabeth.puthoff@icut.org

Angelo State University Sharon Meyer Vice President for Finance & Administration (325) 942-2017 sharon.meyer@angelo.edu

Baylor University Jana Marak Associate Director of IRT (254) 710-2061 jana\_marak@baylor.edu

Baylor College of Medicine Peter Marabella Sr. Director Grants & Contracts (713) 798-6297 peterm@bcm.tmc.edu

Lamar University Gail Davis Director, Contracts & Grants (409) 880-8389 gail.davis@lamar.edu

Midwestern State University Valarie Maxwell Budget Director (940) 397-4346 valarie.maxwell@mwsu.edu Prairie View A&M University Rod Mireles Controller (936) 261-1905 rmireles@pvamu.edu

Rice University Leona Urbish (713) 348-6258 Iurbish@rice.edu

Sam Houston State University Paige Smith Director of Administrative Accounting (936) 294-1091 paigesmith@shsu.edu

Southern Methodist University John Kalb Director, Institutional Research (214) 768-3895 jmkalb@smu.edu

St. Mary's University Mei Lin Lee Director of Finance (210) 436-3414

Stephen F. Austin University Carrie Brown Director of Research & Sponsored Programs (936) 468-6606 brownch@sfasu.edu Sul Ross State University Rio Grande Oscar P. Jimenez Assistant Controller (432) 837-8042 ojimenez@sulross.edu

Sul Ross State University Oscar P. Jimenez Assistant Controller (432) 837-8042 ojimenez@sulross.edu

Tarleton State University DeAnna Powell Grant/Contract Administrator (254) 968-9431 powell@tarleton.edu

Texas A&M International University Fred Juarez III Director, Budget, Payroll, Grants & Contracts (956) 326-2448 fredjuarez@tamiu.edu

Texas A&M University Gregory L. Foxworth Assistant Vice President for Research (979) 845-1812 g-foxworth@tamu.edu

Texas A&M University HSC James Joyce Assistant Vice President (979) 458-7257 joyce@tamhsc.edu

Texas A&M University-Commerce Stephanie Scott Financial Reporting Analyst (903) 468-6019 stephanie\_scott@tamu-commerce.edu Texas A&M University-Corpus Christi Shelley Knight Accountant II (361) 825-5874 shelley.knight@mail.tamucc.edu

Texas A&M University at Galveston William Seitz Assoc. Vice President for Research & Graduate Studies (409) 740-4406 seitzw@tamug.edu

Texas A&M University-Kingsville Maggie Juarez Director, Grants & Contracts (361) 593-2122 kamoj00@tamuk.edu

Texas A&M University-Texarkana Joan Beckham Vice President for Finance & Administration (903) 223-3005 joan.beckham@tamut.edu

Texas Christian Peg Meroney Director of Financial Operations (817) 257-7841 p.meroney@tcu.edu

Texas Southern University Gwendolyn Mami Director of the Office of Sponsored Programs (713) 313-7457 mami\_gm@tsu.edu

Texas State University-San Marcos W. Scott Erwin Director, Office of Sponsored Programs (512) 245-2102 grants@txstate.edu Texas Tech University Kathleen Harris Associate Vice President for Research (806) 724-3884 kathleen.harris@ttu.edu

Texas Tech University HSC Elmo M. Cavin Executive Vice President for Finance & Administration (806) 743-3080 elmo.cavin@ttuhsc.edu

Texas Woman's University Colette Friar Manager-Financial Reporting-Grants (940) 898-3533 cfriar@twu.edu

Trinity University Elizabeth Puthoff Research (512) 472-9522 x 103 elizabeth.puthoff@icut.org

The University of Texas at Arlington Rusty Ward Vice President for Finance & Controller (817) 272-2194 ward@uta.edu

The University of Texas at Austin Juan Sanchez Vice President for Research (512) 471-2877 vp-research@mail.utexas.edu

The University of Texas at Brownsville Suelema Gonzalez Accountant (956) 882-7242 srodriguez@hp.utbtsc.edu The University of Texas at Dallas Reda Bernoussi Assistant Controller (972) 883-2676 rbernou@utdallas.edu

The University of Texas at El Paso Guadalupe Gomez Manager (915) 747-7683 gmgomez@utep.edu

The University of Texas-Pan American Paula Zepeda Grants & Contracts Supervisor (956) 381-2711 pz1092@panam.edu

The University of Texas of the Permian Basin Alex Castillo Director of Accounting (432) 552-2718 castillo\_a@utpb.edu

The University of Texas at San Antonio Carol Hollingsworth Director, Grants & Contracts (210) 458-4229 carol.hollingsworth@utsa.edu

The University of Texas at Tyler Sergio Padilla Program Officer (903) 566-5670 spadilla@uttyler.edu

The University of Texas MD Anderson Cancer Center Carrie Feighl Manager, Finance (713) 745-9464 cfeighl@mdanderson.org The University of Texas Medical Branch at Galveston Govind Narasimhan Manager Sponsored Programs – Post Award & Financial (409) 266-9456 gonarasi@utmb.edu

The University of Texas HC at Tyler David Anderson Accounting Group Supervisor (903) 877-7486 david.anderson@uthct.edu

The University of Texas HSC-Houston Kathy Jalufka Budget Manager (713) 500-4915 Kathy.jalufka@uth.tmc.edu

The University of Texas HSC-San Antonio Chris Green Associate Director, Office of Sponsored Programs (210) 567-4938 greenc@uthscsa.edu

The University of Texas Southwestern Medical Center at Dallas Don Mele Director, Office of Post-Award Administration (214) 648-4300 don.mele@utsouthwestern.edu

University of Houston Nancy Ward Director, Research Information Center (713) 743-9225 nward@uh.edu University of Houston-Clear Lake Paul E. Meyers, Ph.D. Executive Director, Office of Sponsored Programs (281) 283-3015 meyers@uhcl.edu

University of Houston-Downtown George Anderson Assistant Vice President for Business Affairs (713) 221-8449 andersong@uhd.edu

University of Houston-Victoria Tong-Ai Zhang Institutional Research (361) 570-4323 zhangt@uhv.edu

University of North Texas Reata Busby Associate Vice President (940) 565-3794 rbusby@unt.edu

University of North Texas HSC Susan Motheral Senior Research Analyst Office of Strategy & Measurement (817) 735-5091 smothera@hsc.unt.edu

West Texas A&M University Erin Beaty Budget Officer (806) 651-2944 ebeaty@mail.wtamu.edu This and previous editions of Research Expenditures are available at:

https://www1.thecb.state.tx.us/apps/ResearchExpenditures/

Related reports available from our website:

Standards and Accounting Methods for Reporting Restricted Research Expenditures http://www.thecb.state.tx.us/reports/PDF/1003.PDF

Technology Development and Transfer, FY 2003-2004, March 2005 http://www.thecb.state.tx.us/AAR/Research/TechWorkforce/

Technology Development and Transfer, FY 2005-2006, March 2007 http://www.thecb.state.tx.us/AAR/Research/TechWorkforce/

#### For information about this program contact:

Dr. Linda Domelsmith Texas Higher Education Coordinating Board Division of Finance, Campus Planning, and Research P.O. Box 12788 Austin, Texas 78711 (512) 427-6150 Internet: linda.domelsmith@thecb.state.tx.us